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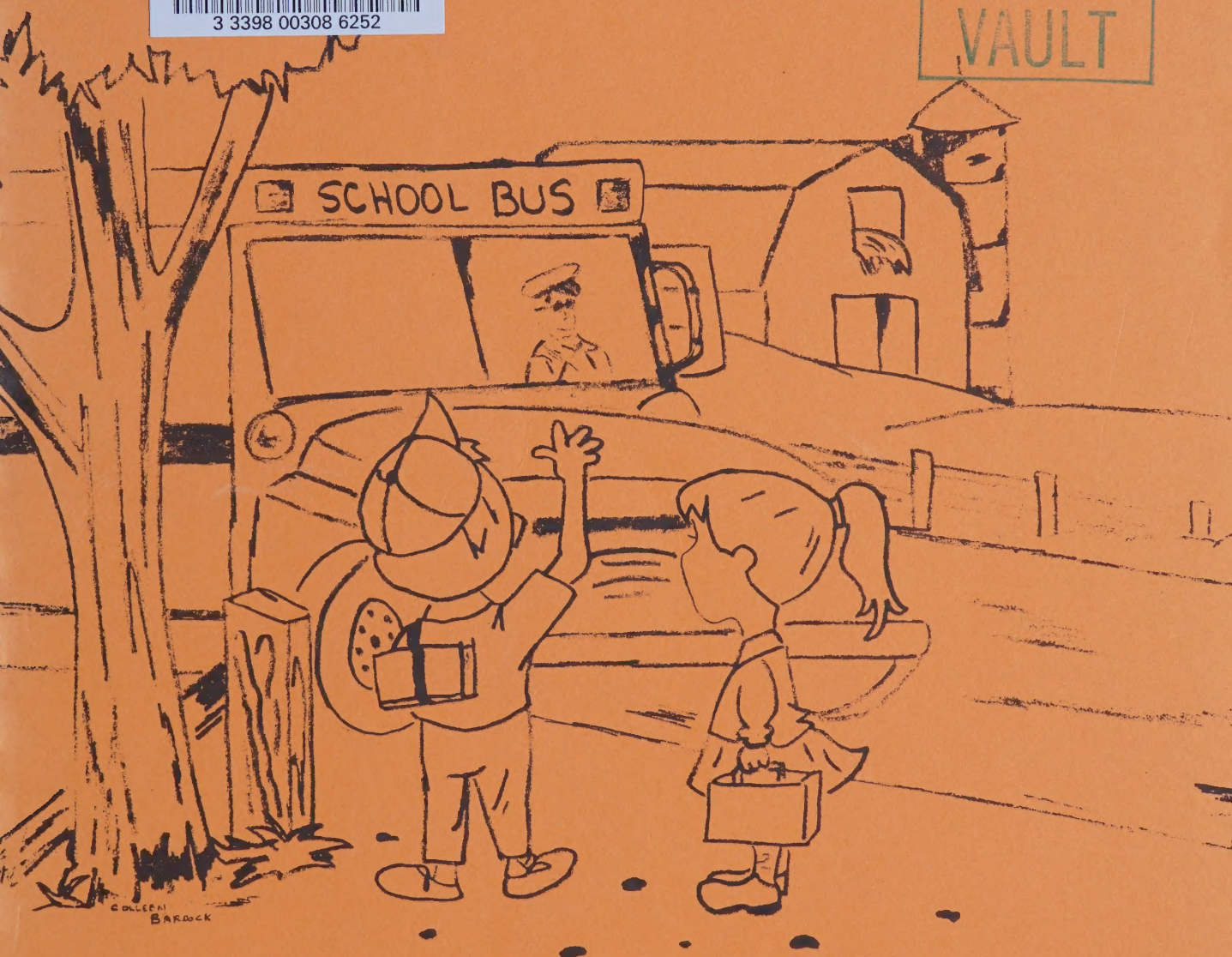

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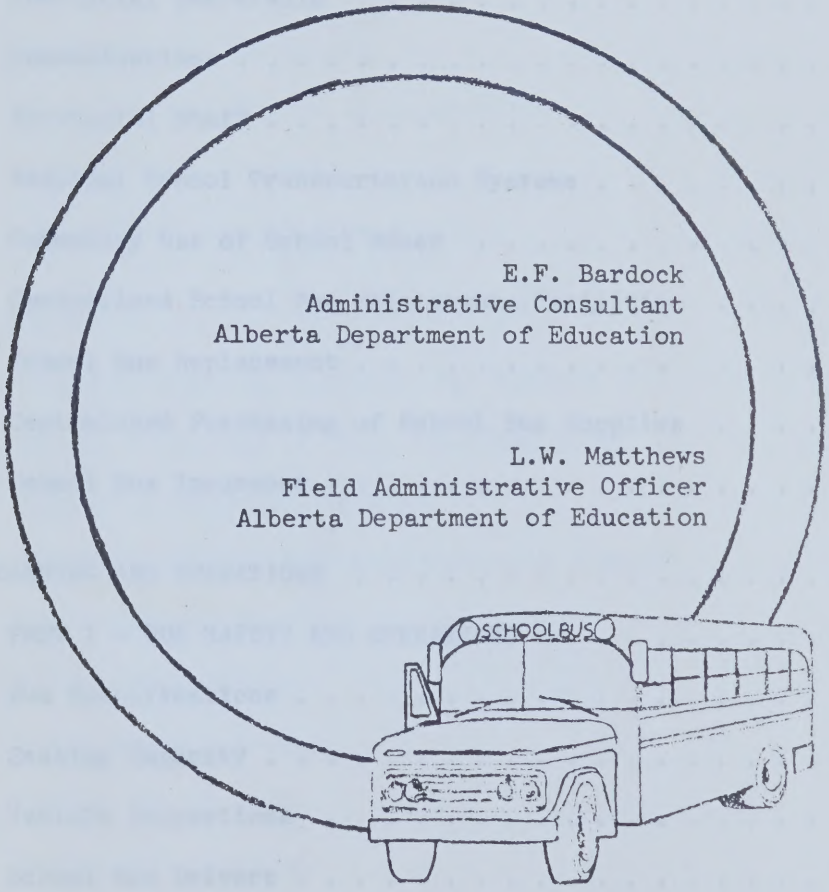

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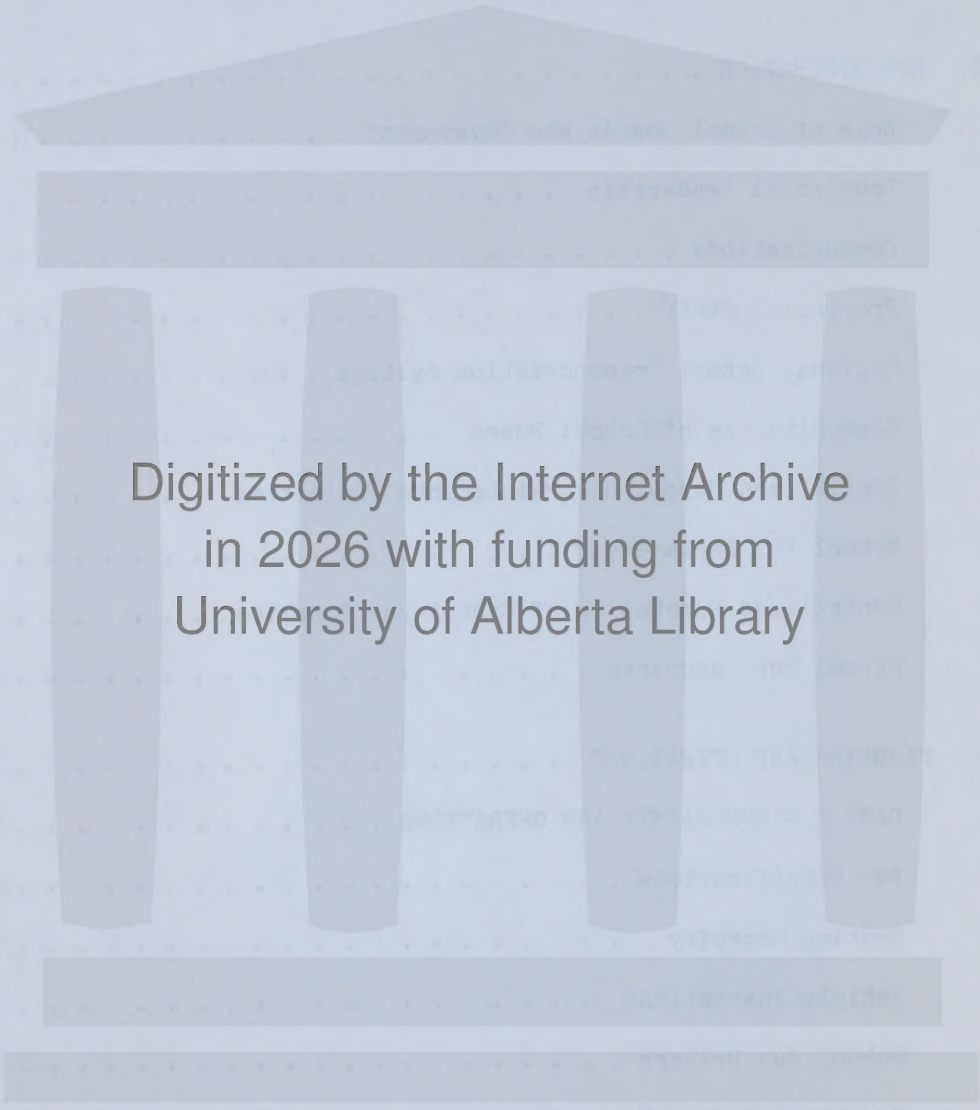
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FOREWORD

At the special meeting of the Alberta School Trustees' Association held in July, 1972, the Minister of Education, Honorable L. Hyndman, announced that a major review of all aspects of transportation services associated with pupil conveyance provided to Alberta pupils would be initiated. In October, 1972, a two member Departmental Committee consisting of Mr. E. F. Bardock, Administrative Consultant, and Mr. L. W. Matthews, Field Administrative Officer, was assigned to the project.

The project began with a review of the existing situation throughout the province and an examination of the previous work in respect of pupil transportation. This involved reviewing the information available in Departmental files, the information available from the Kates, Peat, Marwick and Company Study (1969), commissioned by the Department of Education, on pupil transportation in Edmonton and Calgary, the Department of Education Rural Transportation Study (1968-1972), discussions with various members of the Department of Education, and discussions with members of other Government departments associated with pupil transportation. Subsequently, the relevant literature was researched and contacts with other provinces, states and in-province referent groups were initiated.

Government Guidelines

As a result of this preliminary work it was decided that three essential conditions needed to be satisfied: first, Government guidelines needed to be clarified to avoid unnecessary investigations; second, alternative transportation systems needed to be compared on the basis of a common quality of service; and third, all costs associated with transportation needed to be included.

Government guidelines were announced in a press release on December 4, 1972, in which Mr. L. Hyndman, Minister of Education, specified the following terms of reference:

(a) Local autonomy of boards within overall Government guidelines should be fostered;

(b) Financing proposals should require a minimum of on-site Departmental monitoring;

(c) The study should review "walk limits" of pupils to provide guidelines for equitable levels of Government funding, based on comparable standards of service;

(d) Costs incurred for transportation for school extracurricular activities should remain a local responsibility.

Through consultation with officials of the Alberta School Trustees' Association, arrangements were made to discuss transportation with school trustees and their officials at regional zone meetings of the organization that are held throughout the province. Six meetings were attended; one in each trustee zone of the province.

Preliminary Report

In March, 1973, a Preliminary Report, designed to facilitate the participation of trustees and others involved or interested in pupil transportation services, was published containing information relative to the following:

(a) The purpose and procedures involved in the study.

(b) The data and factors associated with the growth of transportation services in Alberta.

(c) The costs associated with this growth.

(d) A review of provincial support programs.

(e) A highlighting of trends in pupil transportation services.

(f) A review of the major problems in providing these services.

Field Study

The field study aspect of the Transportation Study was divided into two major components:

(1) An indepth review of several pilot system operations with particular reference to routing, scheduling and financing.

(2) A series of indepth discussions with a larger group of pilot systems concerning their transportation operations. A twenty-eight page questionnaire was also completed by each of these jurisdictions.

This procedure was adopted to ensure the fullest participation of as many jurisdictions as possible in order to achieve the objective of obtaining information on the factors Boards consider important in fulfilling their responsibilities with regard to pupil transportation.

All of the jurisdictions operating transportation systems were contacted advising them of the study and its intent. They were asked to indicate their interest in having their operation considered for inclusion in the study.

Selection of Pilot Districts

The selection of pilot jurisdictions for each section took into account the various methods of transporting students:

(a) exclusively board owned systems,

(b) exclusively contracted systems,

(c) a combination system, and

(d) urban systems.

Further, the selection included consideration of the geographic location, the management component, and the type of system to include a selection of counties, divisions and districts. Eight jurisdictions were selected for an intensive survey, and twenty were selected for indepth discussions from the fifty-five that indicated an interest in participating.

Selected for a detailed survey were:
County of Athabasca #12, County of Parkland #31, County of Vulcan #2, Medicine Hat Division #4, Calgary Rural Division #41, Peace River Division #10, Barons District #8, and Edmonton City District #7.

Selected for indepth discussions were:
Pincher Creek Division #29, Willow Creek Division #28, Taber Division #6, Crowsnest Pass Division #63, Foothills Division #38, Three Hills Division #60, Westlock Division #37, Sturgeon Division #24, High Prairie Division #48, County of Forty Mile #8, County of Lethbridge #26, County of Stettler #6, County of Flagstaff #29, County of Beaver #9, County of Warner #5, County of St. Paul #19, County of Grande Prairie #1, St. Alberta Protestant District #6, Grande Prairie Separate District #28, and Calgary City District #19.

The Study Team wishes to express appreciation for the excellent co-operation and support received from the Alberta School Trustees' Association, its member boards and their officials. We are particularly indebted to the boards and officials who were involved as pilot systems.

Acknowledgement is also made of the briefs and letters received from various individuals, organizations and school boards. Finally, we wish to thank Dr. W. Duke, Acting Director of Field Services, for the assistance provided in directing the study and to Mrs. C. Sawatsky and Mrs. V. Hansen of the Lethbridge Regional Office for their work in typing the various manuscripts and questionnaires.

In order to provide additional opportunities for public involvement in the study prior to the submission of any final recommendations to the Minister of Education, the Study Team welcomes briefs and suggestions on any of the recommendations contained in this report or on any other aspect of pupil transportation. These should be sent to:

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Views or conclusions expressed in this report are those of the authors, and should not be construed as expressing the opinion of the Department of Education.

E. F. Bardock

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L. W. Matthews

L. W. Matthews

November, 1973

INTRODUCTION

Pupil transportation is a part of the total educational program and is the direct responsibility of the general administrative and policy forming officials of the district. The value of the program depends on its quality. Efficient transportation can be the means of providing the best education for all pupils regardless of their place of residence while an unsafe or uneconomical system can become little more than a burden.

The present period of major reconsideration brought about by financial constraints is a critical time in the history of pupil transportation in Alberta. In this time, when major readjustments are being considered and/or made, there exists enough background of experience with school transportation that inefficient practices can be eliminated. At the same time, the program developed in the next few years will probably determine the pattern which pupil transportation will follow for the next decade. This, then, is an ideal time for stock-taking as to what is being done in the province and for planning for the future.

To adequately accomplish this, however, there have to be assurances that basic safeguards to the safety and welfare of the transported pupils are maintained. At the same time, governments of both levels must guarantee that no more than is necessary is expended for pupil transportation so that as little as possible of the funds appropriated for public education will be diverted from the direct education of children.

Viewed as a whole, the present status of pupil transportation is one which Albertans can view with considerable satisfaction. The equipment, operating techniques, maintenance programs, safety regulations, and funding

are well above that of most states and other provinces in many respects. Government cooperation at the senior level, and the concern and interest of school boards, has resulted in leadership that has provided very reliable and safe pupil transportation in Alberta.

However, the organization and administration of the public schools cannot be static. While substantial progress has been made toward developing the expanding pupil transportation program along sound lines, it is necessary to look forward to providing still better service at a reasonable cost. Thus the major present and potential weaknesses in both practices and funding must be corrected if the future quality of the program is to be assured.

ADMINISTRATION

As the demands of society have increased the job of the school has become more and more difficult and the complexities of administration have multiplied. Coincident with these developments, there has been a rapid growth in pupil transportation requirements and, in the process, in many school jurisdictions it has become a full-time business requiring specialized and expert management. With the competition for financial resources affecting education as much as other sections of the economy, the necessity of justifying and reviewing costs involved in pupil transportation has become very apparent.

Compounding these problems is the fact that pupil transportation, by its very nature, is a vulnerable target for criticism and trustees tend to be more involved and sensitive to issues here than in many other aspects of board operation.

Role of School Boards and Government

As the review of pupil transportation systems progressed, it became evident that school boards have to give more consideration to including policy development, measurement and control of performance, and overall planning as essential ingredients in the management of their pupil conveyance systems. The rapid growth in the use of pupil conveyance systems unfortunately, has not been paralleled by a commensurate improvement or expansion in the techniques employed in the management of these systems. The evidence is very clear that administrative resources must be upgraded, both in numbers and competence, if pupil transportation is to run effectively.

A school board is elected by the people to manage the collective education interests of the district and exists primarily because it is impracticable for all citizens to give specific and frequent attention to the problems confronting the public service of education. Its role is to synthesize policies from the lay and professional suggestions available and from provincial directives. It must distinguish clearly between policy determination and administration; that is, it must provide very broad control and direction but cannot supply the management for translating a policy into an operating program. As a board it represents the corporate interests of the community; directions are given to school officials, and their performance periodically reviewed. Through this process the board gives basic direction to the transportation service and if it fails to adequately carry out this function, pupil transportation may be dealt with in a lackadaisical manner and become a large consumer of funds sorely needed for other aspects of the education enterprise.

The response, in many states and a majority of provinces, to coping with rising costs, demands for further services, and the need for better management has been to resort to state and provincial control of either part, or all of the operations related to pupil transportation.

The above views, notwithstanding, an analysis of provincial or state controlled systems did not, in general, indicate opportunities for savings in costs that could not be achieved through well managed local jurisdictions. Moving decisions further from local control can be a high price to pay for change, especially when the ideas advanced are weighted towards central control and do not give convincing evidence of

improvement.

The province does, however, have the responsibility for providing leadership to assist local jurisdictions with their pupil transportation problems, both individually and collectively, and to enforce such standards as are necessary for maximum safety and economy.

1. It is recommended that the primary responsibility for the provision of pupil transportation continue to be vested with school boards.

2. It is recommended that the province establish and enforce only such laws, rules, and regulations as are necessary to facilitate the work of the school boards and to ensure the provision of minimum essentials.

Provincial Leadership

A review of pupil transportation operations in the United States and Canada indicates, that regardless of the amount of autonomy that state or provincial governments wish to provide local school jurisdictions, they have a responsibility to legislate and/or encourage improvements in pupil transportation practices. Information outlining the responsibilities of the various referent groups involved in pupil transportation, the safety factors involved, regulations relative to the operation of school buses and school bus operators, minimum standards for vehicles and guidelines for records, reports, and contracts can easily be made available by means of a government publication. Experience in other provinces and states has indicated that the provision of definite guidleines from the government provides uniformity in the operation, and

results in early improvements in all phases of pupil transportation.

3. It is recommended that the Department of Education, in consultation with the Department of Highways, undertake to prepare and publish a Handbook on Pupil Transportation.

4. It is recommended that the Handbook be distributed to all school boards and school bus contractors in the Province.

Communications

In Alberta, rural busing legislation gained support and became legitimate as people learned to believe in the system and as the system demonstrated its effectiveness. Parents, in general, do not oppose the long hours of busing for they are convinced that the quality of their children's education has improved. Conversely, urban and suburban parents see busing mainly in terms of increasing costs with no immediately observable benefits.

Discrepancy of opinion often results from differing experiences or information. Since government officials and elected representatives who are involved in busing in urban areas have had social and educational experiences similar to those of the lay public it can be assumed that the difference in opinion is due to the fact that adequate information has not been provided to the public. It thus becomes apparent that the problem is not so much an experience gap as it is an information gap, or in a deeper sense, a gap of understanding.

Improved communications are needed to provide the information and

understanding needed. Urban and suburban areas legitimately oppose busing because the information necessary for understanding has not been adequately transmitted to them. This has resulted in an unhealthy polarization of attitude and purposes between laymen and government which is detrimental to the welfare of the pupils.

5. It is recommended that the Department of Education embark on a program designed to inform the general public of pupil population trends, the need for busing in the urban and suburban areas, and the costs that are involved.

Provincial Staff

At present, a Field Administrative Officer in the Field Services Branch is charged with spending part of his time with the review of problems in the field of pupil transportation and the review of requests for conveyance support.

During the course of the study, school boards have indicated a willingness to consider suggestions regarding various aspects of pupil transportation that can lead to better utilization of their resources. Improvements in service, often accompanied by substantial reductions in costs, have resulted from this voluntary review of practices and costs.

This provision of assistance should be maintained and expanded by the Department of Education, and by the Department of Highways when practicable, in order that assistance in matters of routing, scheduling, inservice work for drivers and supervisors, vehicle maintenance, operations of public and contract services and accounting can be provided to

school boards. In addition, guidelines for preventive maintenance systems, programs for safety, charting of vehicle costs per mile, public and contract costs, and analyzing operating expenses could be provided.

A disturbing trend, noted in many states and several provinces, is the requirement that local supervisors and field men, or those associated with pupil transportation in Departments of Education, must have one or more degrees in education and administrative experience. This is often carried to the extreme of requiring a doctorate and/or experience in the superintendency when, in reality, what is needed are personnel with backgrounds in mechanical work, an ability to design and understand routing, and a good deal of common sense.

6. It is recommended that the Field Services Branch of the Department of Education engage personnel with experience in school bus fleet operations to work with the Field Administrative Officer assigned to pupil transportation.

7. It is recommended that such personnel be located in Edmonton to provide assistance to the northern part of the province and in Calgary to provide assistance to the southern part of the province.

Regional School Transportation Systems

A promising and practicable solution to the problem of rising pupil transportation costs lies in regional consolidation of transportation systems now operated by individual school jurisdictions. While many states and provinces now operate, or are investigating the possibilities

of operation, under provincial or state control in this area there is no logical reason why regional pupil transportation systems cannot be developed and controlled on a local basis. Student population and geographic considerations would be the determining factors in the regionalization of facilities and coordination of purchases of supplies and vehicles.

The organization authority flow could be: (1) Regional Transportation Board (2) Supervisor of Transportation and Staff (3) Mechanical Personnel.

The Supervisor of Transportation would hold a key position as it would be his responsibility to create, carry out, and integrate pupil transportation practices for the Regional Transportation Board. His duties would include supervising and assigning personnel, recommending the location and assignment of regional garage facilities, establishing maintenance standards and providing financial data to the Regional Board. Depending on the size of the region the supervisor, or a local assistant, would be responsible for routing and scheduling, garage operation, and vehicle maintenance.

To determine whether such integration is feasible, it seems logical to examine the following aspects:

(1) The overall pupil transportation needs of the area.

(2) The availability, utilization and need for maintenance and repair facilities.

(3) The feasibility of such integration in terms of adequate service, convenience and savings.

(4) The financing of the operation.

8. It is recommended that school boards, the Alberta School Trustees' Association and the Department of Education give further study to the feasibility of organizing regional school transportation systems, wherein the planning of pupil transportation could be carried out without regard to the school district boundaries.

Community Use of School Buses

Civic and educational leaders have, in recent years, recognized that the integration of school facilities with community needs has mutual benefits. Both bodies face a constant demand for increased services which means increased expenditures and a need to examine requests for service at the least possible cost to the taxpayer.

In Quebec all control and financing of school transportation was recently transferred from the Department of Education to the Department of Transportation. This transfer offers the possibility of a greater utilization of the public and school bus facilities by integrating, where possible, both transportation systems. It also opens the possibility of offering communities transportation services with school buses where no public transportation services presently exist.

Since there has been success in the integration of parks, swimming pools, school buildings, libraries, and recreation there is reason to believe that a broader use of buses may be defensible and desirable. It is recognized that present legislation will have to be considered to permit the wider use of equipment for extra-curricular community and educational purposes.

9. It is recommended that the government legislation be amended to provide that school boards may enter into an agreement with a recreation commission, or any other similar body, to permit the use by such commission or other body of buses owned by the board for the purposes of a recreation program.

10. It is recommended that school boards, the Alberta School Trustees' Association and the Department of Education consider guidelines for the operation and financing of the community use of school buses.

11. It is recommended that where legal or insurance restrictions prevent the widest possible use of school buses that a concerted effort be made to change such regulations.

Centralized School Bus Maintenance Facilities

Maintenance facilities throughout the province vary considerably. County jurisdictions, because of the nature of their combined operations, generally have their own well-equipped and well-staffed maintenance facilities. School divisions and smaller districts tend to have inadequate facilities. As a result some divisions, and most smaller districts, are contracting with local garages and service stations for the maintenance of publicly owned buses, often at premium prices and without board supervision.

School boards involved in the study, and most trustees in the province, were strongly opposed to centralized, government owned maintenance facilities.

The above, notwithstanding, there is a need for considerable re-thinking of many aspects involved in pupil transportation, its equipment and maintenance if significant reductions in costs are to be achieved, safety requirements maintained and service is to be of high quality.

In British Columbia cooperation between districts in fully utilizing maintenance facilities has resulted in major savings of fifty percent or more on maintenance costs and has had the added advantage of making overall rates quoted by local garages far more competitive. Three examples illustrate the savings possible through the sharing of maintenance facilities. A repair job on a bus, for which the lowest tender was $1,694, was completed for $775 and included a towing charge. Four buses were overhauled at a cost of $2,000 although the lowest tender was $3,500. An engine repair job quoted at $1,700 was completed for $780.

A review of the literature indicates that in states using a centralized program, savings in reduced operating and maintenance costs of up to $200 per bus have been reported. In Alberta, if only $100 per bus savings were achieved, annual savings of $300,000 could be realized.

There are many advantages to be gained from sharing maintenance facilities in various regions to specialize in school bus maintenance. In such cases, proration of costs could be agreed upon and the result would be well-equipped, well-staffed facilities being more fully utilized. It would also provide maintenance and operating information not otherwise available. For example, in one area it was found that the use of a certain brand of tires on school buses resulted in longer tire wear and savings on fuel costs of nearly $10,000 for a fleet of 100 buses.

12. It is recommended that school boards give serious consideration to making agreements with neighbouring jurisdictions to fully utilize maintenance facilities already in existence and that consideration be given to the joint construction and operation of such facilities where none presently exist.

School Bus Replacement

In contrast to every other province, only Saskatchewan and Alberta have no controls on the number of buses that a board may utilize in operating its transportation system.

Two factors are involved. First, there is the question of how many buses a jurisdiction may have to operate its system and the second is how the buses are purchased.

During the course of the study many instances of low utilization in terms of carrying capacity were noted in both contracted and publicly owned systems. The overall range for fleets was sixty to eighty-five percent. It is recognized that in areas of pupil sparsity it is difficult to improve the load factor without unrealistically increasing the time spent on the bus. Entire subdivisions often had capacities of fifty to sixty percent where fewer buses could have been utilized by rerouting, since travelling times were low, and by reviewing contracts in operation.

In one jurisdiction where the difference between operating costs and support grants is over $100,000, a thirty-six passenger bus has operated for the past two years with four passengers during the first year and only two in the second. In another, where the difference in operating costs

and grants is over $80,000, savings of over $50,000 could be made through rerouting and improving load factors.

Boards involved in the study were unanimously opposed to provincial purchasing of buses and to provincial controls on purchases. Nonetheless, if local control is to be continued in this area of operation, school boards and their supervisors will have to give far more consideration to improved routing procedures, to better management and control of their operations and to planning to ensure the buses are required for a sufficient period of time in terms of the capital costs involved.

If a regional system were organized, substantial savings might be made through larger purchases. Studies of large government purchases indicate savings of ten percent on the cost of buses. In Manitoba large savings are not only achieved by bulk purchases, but by the fact that the provincial government is not obligated to pay the federal sales tax since the province provides all of the school buses to school boards and, in this sense, owns them.

The foregoing comments are not intended to leave the impression that pupil transportation should be approached with a cold, impersonal attitude that one would apply to the efficient transport of cattle to market. On the contrary, busing involves a public trust to carry their most precious asset. Maintaining a service under conditions that are conducive to the best interests of the pupils, however, does not absolve boards from providing that service efficiently and economically. As long as public funds are being used, boards that are operating a safe, adequate and economic pupil transportation service have a right to expect that other

boards will endeavor to do likewise.

13. It is recommended that the authority for the purchases of school buses continue to be vested with school boards.

14. It is recommended that the Alberta School Trustees' Association and the Government of Alberta make representations to have the federal sales tax removed from the purchase of school buses.

Centralized Purchasing of School Bus Supplies

There is a definite trend in Canada to purchase school bus supplies on a centralized basis. School boards in Alberta are very opposed to any compulsion in this regard and question the viability of the program despite its reported success elsewhere.

While it is recognized that there are potential savings in this regard, there is concern that they may be largely illusionary in terms of the staffing, storage, and accounting involved. Further, there is the question of allowing smaller local businesses to participate in providing purchases at a reasonable level of profit.

The more than 3,000 school buses in Alberta travel over 36,000,000 miles per year. Supplies are consumed in large amounts. What is needed, more than provincial purchasing, is more widespread recognition that unit variations in cost which seem insignificant in themselves are of great importance in the total operation. A system using 100,000 gallons of fuel each year could reduce its costs by $5,000 if the cost per gallon were reduced by five cents. In one jurisdiction, the municipal district pur-

chased gas at ten cents per gallon less than the school division even though both used comparable amounts since the latter used retail outlets for its purchases. Another paid an extra $6,000 for the luxury of using premium gasoline.

Suffice it to say that the cumulative savings possible are large enough to emphasize that there is a business aspect to school bus operation that cannot be neglected.

If centralized purchasing is desired, ample opportunity exists for school boards to coordinate purchases with neighbouring jurisdictions, through the Alberta School Trustees' Association, and through the Alberta Association of Municipal Districts.

15. It is recommended that the responsibility for the purchase of school bus supplies continue to be vested with school boards.

School Bus Insurance

School bus insurance was a matter of concern with a number of school boards in the study and at several trustee zone meetings. In view of time constraints, only a casual study of this aspect of pupil transportation operations has been made.

School boards have, in recent years, faced significant raises in school bus insurance rates in spite of a good overall provincial safety record. There are indications that some school boards spend $3.00 - $4.00 in premiums for every dollar of claims paid. If this is indicative of the provincial picture, and there is some evidence that it is, then school bus insurance constitutes an undue draw on the educational budget and alter-

natives should be explored.

There are also indications that some boards are having difficulty in obtaining insurance when student drivers are used. In view of the difficulties some boards have experienced in obtaining drivers the entire question of school bus insurance should be examined.

16. It is recommended that the Department of Education and the Alberta School Trustees' Association jointly explore the area of school bus insurance.

PLANNING AND OPERATIONS

BUS SAFETY AND OPERATIONS

School transportation is not a mere convenience for children who live beyond a reasonable walking distance from school. In its basic philosophy and practical existence, school transportation is an indispensable and integral part of our modern school system which has been developed in an attempt to serve the educational needs of our time. It is the beginning and the end of the daily experience for almost every farm pupil in the province and for more than sixty-five percent of all pupils in our public schools.

In Alberta, the number of vehicles transporting school children rose from 697 in 1947 to 2920 in 1971. The annual mileage of school vehicles increased from 5,900,000 miles to over 36,000,000 miles, and the number of pupils involved increased from 15,787 to 135,295. The need and reasons for the growth have been explained in the Preliminary Report (1973) on pupil transportation issued by the study team.

The safety of the pupils utilizing these tremendously expanded services has been the prime concern of all authorities associated with the transportation of pupils and, if the growth in all other traffic on our highways during the same period is considered, the magnitude of the task is realized. Vigilance of both provincial and local authorities must therefore be constantly exercised to ensure that safety regulations and operational procedures are reviewed and strengthened, since it is essential that the services devoted to transportation be adequate both in

quantity and quality. The standards achieved will be as high as the standards of the staff operating the program.

The school board is responsible for all necessary provisions for the transportation of pupils including the establishment, administration, and scheduling of bus routes. Therefore, regardless of whether the board operates publicly-owned buses, or contracts for the service, it should develop carefully defined policies, which are consistent with the pattern of operation selected for the district.

Alberta has, through the Highway Traffic Board Regulations, under the Public Service Vehicles Act, developed comprehensive safety and operating standards for the control of vehicles that can be used for pupil transportation. In addition, safety and operational standards in the province were the focus of attention in the Report of the Committee on Alberta School Bus Operations commissioned by the provincial government after the tragic accident at Lamont, Alberta, on November 29, 1960, in which seventeen students were killed and twenty-five injured. Although the Report is a relatively recent one and there is considerable evidence that Alberta has not only enjoyed a commendable safety record over the years, but that concerted efforts have been made by all concerned to extend and strengthen the safety and operational aspects of school transportation, the terms of reference of this study included a review of this phase of school bus operations in the province.

Therefore, some consideration has been given to the physical and mechanical aspects of school buses, driver qualifications and the operation of school buses as compared to those adopted in other provinces and

states and in terms of viewpoints of those closely connected with pupil transportation in Alberta.

Bus Specifications

Alberta was the first province to adopt the Canadian Standards Association D-250 regulations governing the minimum standards for school buses of 24 or more passenger capacity. As a result, safety aspects of school bus vehicles in terms of vehicle specifications, vehicle size, capacity and inspections are comprehensively covered.

There is concern, however, with the regulations as they pertain to buses of less than 24 rated passenger capacity. As the need for these smaller buses becomes greater, the lack of safety aspects that are required for the larger buses, make the need for stronger regulations and enforcement a necessity.

17. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act be reviewed to ensure that all vans and buses of less than 24 passenger capacity rating used for pupil conveyance conform to high standards of construction, design, quality of materials and equipment to reduce safety hazards to a minimum.

18. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act be reviewed to provide a uniform standard for the external appearance of all vehicles of less than 24 passenger capacity rating used for pupil transportation with regard to signs, lettering and warning lights to ensure the instant recognition of the

vehicle by all motorists.

19. It is recommended that the present Highway Traffic Board Regulations of the Public Service Vehicles Act be amended to guarantee that all vans and buses used for pupil conveyance on highways be yellow in color and that lettering and warning lights conform to high standards to ensure instant recognition of the vehicle by all motorists.

20. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act be amended to provide that where a school bus, whether new or used, is to be used for personal purposes that it be the responsibility of the purchaser to remove the identification lettering and change the color of the vehicle to other than yellow.

Seating Capacity

Although conventional school buses are currently manufactured in sizes providing seating capacities from 24 to 90 pupils, Alberta regulations require for special permits for the operation of school buses of more than 66 passenger capacity rating. The size specification of these vehicles, as set forth in the D-250 Regulations is:

> "Bodies for conventional body-on-chassis type vehicles shall be limited to lengths shown in the table below. Sizes are based on 27-inch center-to-center spacing between rows of forward-facing seats, overall width of 96 inches, center aisle width of 12 inches, and average rump width of (a) 13 inches for 3-3 seating plan and (b) 15 inches for 3-2 seating plan."

Number of rows of seats	Pupil 3-3 plan; rump width of 13 inches	Capacity 3-2 plan; rump width of 15 inches
4	24	20
5	30	25
6	36	30
7	42	35
8	48	40
9	54	45
10	60	50
11	66	55

It was the unanimous opinion of trustees, drivers, and safety officers that the 13-inch rump width is inadequate for high school pupils and that the present 3-3 capacity ratings not only produce uncomfortable seating conditions but constitute a safety hazard. For obvious reasons, it is generally unsuitable to mix high school and elementary pupils in the same rows of seats. Notwithstanding the cost increases involved, buses utilizing a 3-2 seating plan tend to overcome these difficulties.

Where buses are operating along a route picking up students the overcrowding is not a serious problem since the buses are not filled to capacity until the last ten or fifteen minutes of the route. It is of very serious concern where express routes are used or where the load is picked up in a concentrated area. The problem is a matter of equal concern in other states and provinces.

21. It is recommended that boards be encouraged to use the 3-2 buses when considering replacements to their bus fleets.

22. It is recommended that the Department of Education, the Department of Highways and the Alberta School Trustees' Association press for changes in the D-250 Regulations to provide for more ample seating

arrangements.

23. It is recommended that the Department of Education express its concern relative to pupil seating ratings to other provincial departments of education with a view to obtaining support for the changes in the D-250 Regulations and, more important, changes by school bus manufacturers in the construction of the seats on bus units.

Vehicle Inspections

The Highway Traffic Board Regulations of the Public Service Vehicles Act stipulates that every bus shall be examined by a certified mechanic twice a year and that the inspection certificate be available for inspection at all times.

In Alberta there is an equal distribution of board owned and contract school buses. The study indicates that trustees place a great degree of confidence in the inspections carried out by the Enforcement Division of the Department of Highways and in the required inspection certificates.

Concern however, is registered over proposals to require only one certified mechanical inspection per year since it is recognized that the random checks carried out by the Enforcement Division are basically concerned with visible, or easily identifiable features. On the basis of the study it is deemed desirable that school bus checking procedures continue to be required be thoroughly carried out at least twice a year as in the case in the other three western provinces.

It is interesting to note that in British Columbia the government inspectors are trained mechanics and, further, that other inspections are

carried out by members of the RCMP, located in regional areas of the province, who also receive special training in this field.

Boards in Alberta engaging contract buses have found, on occasion, that they were denied the right to inspect the buses for safety and cleanliness. This is further evidence of the need for a written contract clearly specifying the responsibilities and rights of each party. When extra costs are involved for additional inspections consideration could be given to the board paying for them if the bus passes the inspection, whereas the contractor would be liable if the vehicle requires repairs.

24. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act continue to require no less than two formal inspections of school buses each year by a qualified mechanic and that these inspections be required in the interval between the end of the school year and the beginning of the next school year and at a subsequent period not exceeding six months.

25. Itiis recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act require a statutory declaration by the mechanic on the inspection certificate in place of the present procedure of only requiring his signature and certificate number.

26. It is recommended that provincial guidelines be established for the inspection of school buses by drivers, supervisors, and/or contractors.

27. It is recommended that the guidelines regarding the inspections and maintenance to be carried out on a daily, weekly, or other period deemed suitable, be published in a manual format and be distributed to all jurisdictions in the province concerned with pupil transportation.

28. It is recommended that where school boards engage contract buses that the contract clarify the right of the school board to require inspections, when in their opinion, they are deemed necessary.

School Bus Drivers

Regulations concerning the issuance of bus driver licenses under the Alberta Highway Traffic Board Regulations indicate that licenses are issued subject to a written test required for all license classifications, a minimum age of eighteen, a satisfactory medical certificate and a driving test in a vehicle.

School systems in Manitoba and British Columbia employ more full-time drivers than is the case in Alberta or Saskatchewan. In Manitoba it is mandatory to pay for a minimum of three hours for each call out at a minimum wage of $1.90 per hour; in Saskatchewan school bus drivers are exempted from minimum hour and wage provisions, while in British Columbia wages are negotiated by unions and, at present, are $5.35 per hour on a two hour minimum call out basis.

In Manitoba and in British Columbia a special bus drivers' license is required along with driving experience, but in Saskatchewan there are no special requirements. In practice few drivers are under twenty-five

years of age in these three provinces. Average salaries are $4,670 in British Columbia, $2,700 in Alberta, $2,200 in Saskatchewan and $2,300 in Manitoba.

It is an understatement to say that the driver is the key individual in the operation of a safe and efficient system. While safety is of paramount concern, situation after situation was indicated during the study, in which the careful selection of competent drivers also reduced operating and maintenance costs.

The study also revealed that in many areas of the province school boards are facing increasing difficulty in obtaining qualified drivers. This is particularly true in the heavily populated areas where other employment at higher rates is available.

School boards and the government will have to face the issue of whether school bus driving is to be a part-time or full-time occupation. If it is to be the former, then provisions may have to be made for the recruitment of the major portion of drivers from among women and high school students. This has implications for their training and supervision. There will be a need for long term planning and for cooperation between government departments, school boards, and school bus supervisors to ensure an adequate training program. In this regard, the study team noted widespread concern amongst supervisors and trustees that bus driver examinations were being carried out by members of the Highways Department who are not in possession of the required certificate or ability to drive buses themselves.

Research indicates that student drivers of both sexes, who are carefully selected and trained, offer good driving skill and judgement. The

use of student drivers does provide boards with an opportunity to hire the best of an entire age group whereas the selection of adults, particularly when restricted to male drivers, lowers the number available. Some of the boards reported excellent success with student drivers; others indicated maintenance and operating costs rose significantly. Some difficulty in obtaining insurance when students were hired was also indicated.

If the second alternative is chosen, additional funds on a dramatic scale will be needed. If the British Columbia monthly rate of a minimum of $467 for two trips per day is a guideline, then an increase in provincial funding of between $6,000,000 and $12,000,000 a twenty-five to fifty percent increase, will be required for pupil conveyance.

29. It is recommended that the minimum age of school bus drivers remain at eighteen years.

30. It is recommended that the maximum age of school bus drivers not be established by provincial legislation but be controlled by local school authorities in terms of the ability of the driver to drive the school bus and by his medical condition as established by medical reports.

31. It is recommended that a special license for school bus drivers be established requiring a written qualification examination designed to test the special knowledge required to operate a school bus in addition to any written examination given to ordinary drivers; that each school bus driver qualify in a road test in a school bus and

that where the road is taken in a bus of less than 24 passengers the license restrict the driver to a vehicle of the size or smaller than the bus in which the road test was taken.

32. It is recommended that all employees of the Department of Highways conducting road examinations for school bus drivers be required to be in possession of the required license themselves and that the Department of Highways be responsible for any expenses involved in obtaining said license.

33. It is recommended that provincial guidelines for a bus drivers' manual be developed and that school boards be encouraged to adapt it to include their own policies and regulations.

Inservice Safety Programs

In previous years the Safety Division of the Department of Highways had the responsibility for promoting preservice and inservice programs designed for school bus drivers in which procedures were taught or identified on how best to deal with the varied driving and operational situations that arise in pupil transportation. In addition, the Division had the responsibility for promoting safety programs in the schools and for supervising school buses with regard to promoting safety matters which would enhance the safety of the pupils being conveyed.

With the breakup of the Safety Division in 1965, and especially since 1968, provincial authorities have not been visiting schools to discuss safety, or to supervise school buses with regard to safety. This

is reflected in the decreased number of programs boards have sponsored for bus drivers and the lack of safety instruction programs in schools.

34. It is recommended that the government consider the reactivation of the Safety Division in the Department of Highways, or adding staff to the Enforcement Division of the Department of Highways, with a view to promoting safety programs in the schools and being responsible for preservice and inservice training programs for school bus drivers.

Accident Reporting

In terms of mileage the school bus accident record in Alberta is very low. Although more than thirty-six million miles per year have been travelled in the past three years fewer than one hundred accidents per year have been recorded.

This accomplishment is a source of great satisfaction and is an indication of the concern and acceptance of responsibility by both provincial and local authorities for the safety of the pupils.

The luxury of smugness, however, cannot be afforded. Sizeable increases in population, in vehicular traffic, in smaller feeder vans, and other variables have resulted in a need for continued vigilance in the area of school bus safety. It is disturbing to note the number of boards that have no policy for the reporting of accidents and the review of driver records and safety measures in their jurisdictions.

35. It is recommended that school boards operating publicly owned and/or contracted transportation systems require that all accidents, regardless of degree, be reported to the school board.

ALBERTA SCHOOL BUS ACCIDENTS

	1970-71 Sept.-June	1971-72 Sept.-June	1972-73 Sept.-April
TOTAL	91	98	92
INJURIES	*	39	40
FATALITIES	*	1	1
PROPERTY DAMAGE	*	$70,038	$70,625

*Not Available

AMERICAN SCHOOL BUS MANUFACTURERS' INSTITUTE REPORT

	Typical, Large Size School Bus	Small Vans, Mini-Buses Station Wagons, Etc.
Jan.-Dec. 1970		
Accidents	1,950	67
Injuries	2,886	197
Fatalities	7	14
Jan.-Dec. 1971		
Accidents	2,240	86
Injuries	3,591	355
Fatalities	23	8

These statistics indicate that although vans and other similar vehicles are only involved in a small percentage of the total number of accidents, a far greater danger of injury or death results.

36. It is recommended that the present Highway Traffic Board Regulations of the Public Service Vehicles Act be amended to require that all school bus accidents, regardless of degree, be reported to the Enforcement Division of the Department of Highways, and that a consolidated cumulative report of these accidents be provided to the Department of Education at least twice a year.

Seat Belts

A school bus does not provide the comforts or options available for a car nor does it move with the same speed or convenience. Instead, out of necessity, school buses operate on carefully timed routes that are already affected by the numbers and ages of the pupils conveyed, the time and frequency of stops, road conditions, traffic patterns and weather conditions.

Some 70,000 pupils are already spending two hours per day on a bus. If drivers are to assume the responsibility for ensuring that seat belts are utilized, route time schedules would be lengthened to a degree that would be unacceptable to parents. Further, any additional waiting times would pose problems during inclement weather.

Reports from medical authorities indicate that padded railings and better seat construction are more important for the prevention of injuries since seat belts can cause injuries to the pelvic region. In the event of an accident or fire requiring quick exit from the bus, a real hazard might be present if small children were unable to unfasten the belts with ease.

Another aspect that could cause major problems would be found in keeping the seat belts clean to avoid presenting parents with a daily cleaning job. Busing is already a controversial enough topic without adding further difficulties to the public relations sector.

Cost factors cannot be neglected. There are over 3,000 buses operating in the province, transporting over 135,000 pupils. Some quotations from companies indicate a cost as high as $80.00 per set, but even if the cost were $25.00 - $30.00 per set, an initial outlay of between three and four millions of dollars would be involved.

Before any legislation that could affect safety on such a broad scale is introduced, every aspect of the problem should be thoroughly studied.

37. It is recommended that further study be given to the question of making seat belts on school buses mandatory.

Liaison

There are advantages to having an interdepartmental committee composed of members from the Department of Highways and the Department of Education meet once or twice a year on matters relative to pupil transportation. There is also much to be gained from providing a formal opportunity for other referent groups to discuss the various issues involved in pupil transportation.

38. It is recommended that an interdepartmental committee composed of members from the Department of Highways and the Department of Education be established.

39. It is recommended that an interdepartmental committee meet, at least once annually, with members from other referent groups such as the Alberta School Trustees' Association, Alberta Safety Council, the Alberta Federation of Home and School Associations and the Alberta School Bus Operators' Association.

Highway Speeds

Section 6.9.1 of the Highway Traffic Board Regulations under the Public Service Vehicles Act states:

"No motor vehicle, while operated as a school bus, shall travel in excess of the following speeds:

(1) Fifty (50) miles per hour on any primary highway as defined in the Public Highways Development Act.

(2) Forty (40) miles per hour on all other highways."

The majority of trustees, safety officials and others concerned with pupil safety and operating efficiency of school bus transportation who were interviewed are of the view that the road conditions in Alberta are of a very high standard and that these speeds are unrealistic for most of the province. Indeed, there is some concern that in some areas, where excellent roads are available, they constitute a safety hazard.

At the same time, however, there is evidence of widespread trustee and public concern that school bus construction is such that increased speed limits may require major changes with respect to safety measures.

The study also recognizes that school buses have to travel on a wide variety of roads, from four-lane divided highways to dirt or limited access

roads. They must also travel in all kinds of weather conditions, from sunny spring days through blizzards and 40° below zero temperatures.

40. It is recommended that the Alberta School Trustees' Association and the Department of Education give further study to the question of increased speed limits for school buses.

41. It is recommended that school boards have written policies governing the maximum speed vehicles used for pupil conveyance may travel considering road conditions and traffic volume within the boundaries of their jurisdiction.

PLANNING AND OPERATIONS

PLANNING BUS ROUTES

The prime objectives of any pupil transportation system are to provide a transportation service that ensures maximum safety during the trip, transports all eligible pupils to and from school in reasonable comfort and convenience, satisfies local requirements, and does all of these things as economically as possible. Key factors in fulfilling these objectives are route design and planning for future route needs.

At present, over one hundred thousand rural and more than thirty-five thousand urban pupils travel nearly two hundred thousand miles per day to reach school. Educational leadership can find much to challenge its thinking, in the observation that the majority of these pupils must leave their homes before 8:00 a.m. to reach school. Ten percent of the routes reviewed in the study were more than forty-five miles in length and, as a result, a significantly large group must leave home before 7:30 a.m. every morning. The same is true for the opposite end of the school day. It is literally true that these young people have limited free daylight hours from one weekend to the next.

The study indicated that at least sixty-five percent of the 101,000 rural pupils enrolled and transported must spend two hours each day enroute to and from school. Clearly, then, route design and planning are two of the most important functions of the transportation service and viewed in terms of the entire picture, it is apparent that much needs to be done to improve the situation. In many cases, better utilization of the present

funds available is needed rather than the provision of additional revenues.

Role of the Superintendent of Schools

It was quite apparent, in almost all of the jurisdictions surveyed, that the superintendent of schools was either hesitant to assume responsibility for transportation or else was not permitted to do so by the board. The superintendent was not present at fourteen of the twenty-three meetings held with boards and took part in the discussions in only four of them. In one instance the superintendent was designated complete responsibility for pupil transportation.

The potential savings in pupil transportation operations are significant in many jurisdictions. There is a leadership role that the superintendent can assume, in cooperation with board of trustees, secretary-treasurer, and bus supervisor, to provide a safe and effective system of transportation that is economically operated. Since every dollar expended for transportation must come out of public funds appropriated for public education, and wasteful expenditures mean a direct loss in funds appropriated for the education of children, the superintendent cannot fulfill his obligations as the executive officer of the board without appraising the effectiveness and costs involved in pupil transportation.

In two of the pilots the potential savings through proper routing, monitoring of statements, elimination of unnecessary buses, etc. amounted to over $70,000 in each. Surely sums of that magnitude, expended needlessly, demand more attention from the management team responsible for school operations.

42. It is recommended that the superintendent of schools assume an executive role in appraising the effectiveness and costs involved in pupil transportation.

Bus Supervisors

Of the twenty-three jurisdictions in the survey, seven had no bus supervisor, three used one on a less than twenty-five percent of time basis, three on a fifty to seventy-five percent basis, and ten were on a full-time basis. The majority were appointed in the past four years. This is in direct contrast to Manitoba and British Columbia where most systems have a bus supervisor, but similar to the situation in Saskatchewan. Average salaries of bus supervisors in British Columbia were about $12,000, in Alberta $8,200, in Saskatchewan $7,500, and $8,400 in Manitoba.

There are systems too small to afford a transportation supervisor and in such cases the duties must be assumed by other officials or by a committee of trustees. The operation of a regional system or the cooperation of adjoining systems has a great deal of merit in these situations. Research and literature in the field of pupil transportation indicates that the role of the bus supervisor is an important one. He has major contributions to make in the safe operation of the system in the provision of a better quality of service, and in contributions to the efficiency of operation.

In Alberta, in the school jurisdictions where a supervisor was retained and where his responsibilities were defined, there were indications of more efficient routing and scheduling, vehicle maintenance, inservice work, better cost control and purchasing, improved bus utilization and

control of the operation by the school board. There were exceptions and some boards with average size bus fleets exhibited strong control over their operation without the aide of a supervisor. One questions, however, whether the time and effort might have been more profitably spent in the overall management of the school system and whether the appointment of a supervisor would not remove local politics from the situation so that the overall quality of the transportation service could be improved.

Another major reason for the lack of control over costs is the practice of some boards giving contract bus operators full charge of all aspects of the operation, including routing. Supervisors are needed in both publicly owned and contracted systems. Based on the experience of the boards in the study that had already engaged supervisors, on the indepth study of a number of others, and on the research available, it would be unusual if savings of ten percent could not be realized in the first year of the appointment of a supervisor. One factor common to most systems is that they contain a certain amount of unused capacity. In the study this ranged as high as fifty percent. It is surprising how very small changes in operating procedures can effect major increases in capacity utilization and eliminate difficulties in meeting operating criteria.

The transportation supervisor is of inestimable value to the conveyance operation; particularly when the size of the fleet and/or routing become major factors. No other recommendation in the study is as important in view of the impact that a supervisor, knowledgeable in school bus fleet operations, can have on education in the district through the provision of safe, adequate and economical pupil transportation.

43. It is recommended that school systems, whether publicly owned or contracted, employ a bus supervisor.

44. It is recommended that where it is not feasible to employ a bus supervisor in a full-time, part-time, or dual position capacity, that school systems cooperate to employ a bus supervisor jointly to serve two or more systems.

45. It is recommended that the supervisor's duties be specified in writing to clearly establish his responsibilities and authority.

Planning Bus Routes

A basic principle in providing provincial funds is to ensure that the factors in the transportation formula cannot be controlled or manipulated by a local school unit. Among the factors subject to control are the number of buses used, the number of miles travelled, and the number of pupils transported. For example, the walk distance standard of one and one-half miles in Alberta is not self-enforcing. The alternative to using factors which cannot be manipulated is for the province to exercise sufficient authority through standards, supervision, and auditing to prevent abuses.

Individual route maps and large overall route maps have to be filed with the provincial supervisor in the provinces of Manitoba and British Columbia. Manitoba requires provincial approval for any additions to a bus fleet; in British Columbia provincial approval is required for any change in a bus route of more than two miles. In Saskatchewan the

capital costs of bus purchases are included in the calculation of the grants paid for pupil transportation. Alberta has provided for bus purchases through a schedule of grants paid over an eight year period thus providing boards with a considerable amount of autonomy in determining the size of their bus fleets.

A fundamental issue arises. Some inefficiency is due to lack of proper management and information. In most of the American states the solution is to require the local jurisdiction to carry a considerable part of the cost of transportation as an incentive to efficient operation. However, while it may be argued that efficiency is promoted to some degree by these practices, thus ensuring reasonable expenditures of the allocated funds, it may merely involve a shift of the cost of inefficiency from the senior level to the local level of government. It appears that assistance from provincial personnel is needed to upgrade the management of many systems. The question then concerns the extent to which the provincial government can provide advisory assistance, set up certain standards, and require that they be observed without unduly infringing on local autonomy or incurring costs that would offset any intended savings.

The problem is compounded by the very growth of pupil transportation services in terms of the changes that have occurred in our way of life. Thirty years ago, a walking distance of two or three miles seemed quite reasonable as most people frequently walked that distance or more for many purposes. Today, few people walk it for any purpose. These sociological conditions require an increasing portion of the school dollar for financing. Thus, both provincial and local governments have responsibilities for assuring that while there are sufficient funds for an adequate and safe service, there is little leeway for extravagance and inefficiency.

Trustees in Alberta have argued that the province should not exercise such control over school boards. The study of route planning procedures and practices, however, indicates that transportation funds could be far more effectively utilized. The evidence suggests that as a result of the previous three year averaging financing formula many boards did not maintain a high level of concern for examining the source and need of rising costs. In too many cases, individual route maps, schedules, and overall route maps were non-existent. Load capacities were down to as low as fifty percent and seventy percent was a good average. Consequently, more buses than were needed were being used.

Monitoring of practices and expenditures at the local level declined markedly. A study of payments to contractors, for example, indicated there are often serious differences between the mileage claimed and the mileage driven. In one jurisdiction an eighty-five mile per day route was actually sixty-six miles in length, thus involving an overcharge of nineteen miles per day at an additional cost to the board of $660.00 per year. Another route in the same jurisdiction was claimed as being ninety-seven miles in length but was only eighty-three miles long. This overcharge of fourteen miles per day involved an additional cost of $570.00 per year to the board. An analysis of all of the routes in one system indicated an overcharge of more than twenty-three thousand miles annually. When overcharges of nearly thirty percent are permitted to go unchecked, and when repeated instances are found in a jurisdiction, one can only conclude that monitoring practices are non-existent.

Harsh as the criticism might seem, too often the transportation program was viewed as a necessary service which was started in the fall and then given very little subsequent attention. Custom, the judgment and experience of the driver, and pupil residence dictate the nature of bus routes. Unless there are complaints from parents or drivers, or changes in the location of schools assigned due to shifting population, it is very likely that the services rendered by the bus fleet when school closes in June will be very similar to the bus services conditions prevailing in September.

If there is one word to describe the pupil transportation systems in Alberta it would be "diversity". Each jurisdiction is unique in some aspect, such as the network and condition of the roads serving the area, differences in terrain or climate, the distribution of the pupils, the density of population, and the location of the schools serving the district. The provision of a safe and effective pupil transportation system thus involves a great deal of subjective judgment. What is reasonable and suitable for pupil transportation in southern Alberta may be wholly inadequate in the northern parts of the province. Bus specifications needed in one area of the province would be a needless expense in another.

Considering these aspects, it seems logical that local school boards, operating in cooperation with effective management, are in the best position to consider improvements in the efficiency and effectiveness of their pupil transportation programs in terms of the services selected as being best suited to their needs and the level of financial support available from local and provincial sources. In this way, local incentive for providing an adequate and safe service through the proper utilization of funds available is maintained.

It is deemed desirable for the government to couple this local familiarity of circumstances with provincial assistance and a certain minimum of standardized information to assist boards to obtain a greater degree of control over the expenditures in pupil transportation. The information needs to be functional, if it is not actively used it becomes a requirement to be fulfilled and forgotten. It is recognized that the introduction of such procedures will initially increase the work load of a board's officials, but the benefits in subsequent years in efficient routes, reduced effort, financial savings, and overall control of costs are too important to overlook.

46. It is recommended that the Department of Education provide each school board with a manual of guidelines illustrating the procedures involved in planning efficient bus routes.

47. It is recommended that the Department of Education assume the responsibility for organizing training and information seminars on school bus route planning.

48. It is recommended that all school boards operating pupil conveyance systems develop and adopt clear operating policies and guidelines regarding the routing and scheduling of school buses.

49. It is recommended that school boards assign the responsibility for school bus routing and scheduling to the school bus supervisor.

50. It is recommended that the Department of Education require all school boards involved in pupil conveyance to keep on file a master map of all routes currently in operation and a set of maps showing the individual routes currently in operation.

51. It is recommended that the Department of Education require all school boards involved in pupil conveyance to keep on file, in a suitable format, information showing the bus route number, the location of the pupils, the number of pupils conveyed on the bus and bus time schedules.

Attendance At Any School

A policy which has an effect on routing in some jurisdictions is the policy of allowing pupils a choice of schools and providing transportation service to that school. In one case a family had three buses stopping at their residence to deliver their three children to three different schools although there was a school nearby that could have accommodated all of them. In the same jurisdiction a family resided only five miles from a school offering Grades 1-12, but the pupil transferred buses three times to attend a school twenty-five miles away.

It is obvious that additional expenses are incurred and the routing and scheduling are complicated when bus transfers become necessary to provide service to schools outside of the normal attendance area. Furthermore, by allowing this option full use is often not made of the staff and facilities in the natural boundary area, while overcrowding of classes and facilities exists in other schools. This practice constitutes an undue drain on public funds.

52. It is recommended that the additional costs of pupil conveyance involved in permitting pupils to have a choice of schools in a jurisdiction be a local responsibility.

Pupil Eligibility for Transportation

A major cost factor in administering the transportation system at the local level is deciding the conditions under which pupils are eligible for transportation. Grant support payments generally include a restriction of non-payment for pupils, regardless of age, who live within a specified distance from the school.

At the present time the walk-to-school distance within which pupils are not eligible for school transportation is covered under Section 156 of the School Act which states:

> 156. (1) Subject to the other provisions of this Part, a board shall by agreement with a municipality or otherwise provide transport for pupils resident in the district or division to and from the site of the school that the board has directed the pupil to attend if the parent of the pupil resides at a distance greater than 3 miles from the site of the school that the board has directed the pupil to attend.
>
> (2) The board shall be deemed to have complied with subsection (1) when transport is provided on a route that is not more than 1 1/2 miles from the residence of the pupil's parent.

Thus all pupils, except those having a severe mental or physical handicap, regardless of age, are obliged to walk the one and one-half mile distance unless the board supports such transportation through local revenues. Alberta has one of the shortest distances for eligibility for grant support of transportation on the continent. Manitoba is one of the

few requiring one mile. Saskatchewan requires two and one-half miles and British Columbia two and one-half to three miles.

The study indicated that although boards readily accept a provincial regulation for support payments, they feel that local jurisdictions should have the authority to adopt their own rules on eligibility supported by local revenues. Boards expressed the view that for elementary children the distance was excessive, particularly during the severe winter months, and in some areas of the province it is inadvisable to require pupils to walk to school at any time because of the sparsity of population and danger from animals.

There are also situations where heavy high speed traffic constitutes a danger and the board would be abdicating its responsibilities to its constituents if transportation service was not provided to maximize the safety of the pupils.

A recent government decision to extend financial support in the urban areas for the transportation of all elementary students living within three-quarters of a mile of the school further complicates the issue. This decision, while temporary in nature, was made to facilitate a broader use of existing school facilities in the urban areas. While the legislation was well intended, its broad coverage of all elementary pupils, regardless of whether school facilities already existed in the area, raised questions about the eligibility of all rural elementary pupils.

It is easy to accept the intent of the legislation but it is extremely difficult to defend it as presently practiced. A question can also be raised as to whether existing regulations were not adequate to accomodate

the situation. The view that the solution is to automatically extend the three-quarters of a mile limit for eligibility to pupils in towns, villages and rural areas is not realistic in terms of practicality and cost.

53. It is recommended that the Section 156 of the School Act remain unchanged.

54. It is recommended that Section 5 (1) (a), Part B of the School Foundation Program Regulations, outlining conditions for eligibility for transportation support for rural areas remain unchanged.

55. It is recommended that the Department give further study to the costs involved in reducing the distances required for pupil eligibility for transportation for all pupils.

56. It is recommended that Section 7 (2) (a), Part B of the School Foundation Program Regulations, providing for three-quarters of a mile distance eligibility for transportation support for urban pupils be rescinded.

Walk Distance to Buses

The matter of walking distances required for school bus access is a matter of major concern to school boards since, in many instances, pupils reside some distance from a main road. The regulations in most provinces provide that buses travel the shortest route and make as few stops as possible. In British Columbia service need only be provided within two miles of the gate. Similarly, the Saskatchewan provision is for within one and one-half miles, and Manitoba one-half mile. Boards in Alberta, in

general, are providing gate service and a number are providing door service. In other words, walk limits for school bus access are almost non-existent.

There are valid reasons for this attitude in rural Alberta. During inclement weather buses can easily encounter difficulties and not reach their destination at the regularly scheduled time. This concern is one that is not lightly dismissed regardless of the extra costs that may be involved. Another important factor that prevents setting an arbitrary criterion is that consideration has to be given to both the age of the pupil and the total walking and riding time involved. It may sound reasonable to expect a high school student to walk up to a mile to reach a collection point, but if he has to spend an additional hour riding the bus the idea is impractical. For these reasons, the problem of a walk limit for school bus access is a far more serious and contentious problem than the walk limit to school. This entire question can best be reviewed at the local level in terms of time, ages of pupils, climate, geography and population. However, it is important that it be done on a formal basis.

Boards also want Section 156(1) to remain in The School Act since there are some instances in which pupils are sufficiently removed from a main road to be not readily accessible or are located in an area that bus times for the majority would be adversely affected by any attempt to provide service.

Several factors relative to walk distance to buses deserve further consideration. The first is the extra mileage and cost involved. In three jurisdictions reviewed, the mileages involved in providing service closer than 1 1/2 miles to the gate were 28,000, or three percent of the total

yearly mileage; 60,000, or five percent of the yearly total, and 107,000, or nine percent of the yearly total. Boards may have valid safety reasons for wanting to give gate or door service but when the total mileage reaches nine percent for this service alone, then some reconsideration may be needed. For example, if a one-half mile walk were instituted in the last jurisdiction the mileage drops to 40,000 miles annually.

Another problem is the point of the first pick-up. Normally, it should be at the furthest point from the school in order to reduce travelling times for all students. However, in many instances this guideline was not followed and students who lived as little as two miles from school were being picked up first and involved in a sixty to eighty minute bus ride.

Travelling times are often abnormally high in relation to the distance travelled as a result of the inefficient use of bus stops. Frequent stops a minute apart, and less than one-quarter of a mile apart, added significantly to the riding time. One also has to seriously question the necessity for entering subdivisions and providing door service in suburban areas. Too many stops is not a service to the overall load of pupils. If each stop only takes two minutes, the elimination of ten stops means twenty minutes of travel time saved, which multiplied by the total bus load involves a considerable amount of pupil time. This also applies to the time consumed by providing door-to-door service. In the summer, in particular, a great deal of time could be saved.

The wide variation in local geographics conditions, weather conditions and population dispersion seems to indicate that while provincial guidelines

need to be established, considerable latitude and responsibility for decisions needs to be left to the local jurisdiction in order to accomodate differing local situations.

57. It is recommended that boards avoid door pick-ups whenever practicable and that they examine the possibilities of minimizing the number of stops along scheduled routes by exploring the possibilities of employing collecting points to greater advantage.

58. It is recommended that the decisions regarding school bus access continue to be vested with local school boards.

Duplicate Transportation Services

There were only a few isolated cases of school systems operating duplicate transportation services within the boundaries of another school authority. Trustees were concerned, however, that the present general per pupil support formula encourages boards facing declining enrolments to offer better transportation services than the resident jurisdiction in order to attract more pupils.

There are a number of areas in the province where this has the potential of becoming a serious problem. More than a misuse of public funds for duplicate transportation services is involved. The resident jurisdiction is left with facilities and staff that are not utilized to the fullest extent and, more important, programs at all levels may have to be sharply curtailed because of a lack of pupils.

59. It is recommended that the School Foundation Program Regulations be amended to ensure that no school authority shall claim for transportation any pupils legally under the jurisdiction of another authority and that no transportation costs for any such pupils shall enter into the calculations of total transportation costs; provided, however, that by formal agreement, one authority may transfer all or part of its transportation responsibilities to another.

60. It is recommended that such transportation agreements be filed with the Department of Education.

FINANCE

The problem of determining defensible methods of providing provincial funds for pupil transportation is a difficult one. Individuality characterizes provincial and state plans for financing conveyance systems. However, equal educational opportunity is a myth unless the province assumes a major portion of the financial responsibility for this important aspect of education. In Alberta, as is the case in the other four western provinces, the recognition that pupil transportation services are an integral part of public school education with the province assuming a major responsibility for financing the program, has resulted in excellent progress in the provision of an adequate and safe system.

Criteria Involved in Provincial Funding

Provincial financial support should be based on a simple formula that will allow for any varying costs between areas and not involve a great amount of statistical detail from local jurisdictions. Many, if not most, of the formulae used to allocate provincial and state funds for pupil transportation are unduly complicated and difficult to interpret. In addition, they require considerable statistical detail from local jurisdictions and involve large administrative costs at both levels of government.

In Alberta, it was found that very little pattern existed with regard to the cost of services in various parts of the province. Any provincial funding, therefore, has to take into account that there is considerable variation in providing a justifiable level of service. In this respect,

flat grants negate the principle of equalization because factors such as the sparsity of population, road conditions and wage scales can place an undue burden on the funds a local jurisdiction requires for the improvement of educational opportunities for its pupils.

Another basic principle in providing provincial funds is to ensure that the factors in the formula cannot be manipulated by a local school unit. The alternative is for the province to exercise sufficient authority by monitoring or auditing the operation to prevent abuses. There is an obvious conflict between the theory of keeping administrative costs at a minimum with a simple formula and that of including all of the factors which have a major impact on the costs regardless of whether they are subject to manipulation. The approach that is taken reflects, to some degree, the confidence the province is willing to vest in local government.

Another common criterion is to base provincial support for pupil transportation on past cost experiences. The three-year averaging formula used in Alberta since 1964 utilized this rationale. Its weakness is that much of the past experience was based on inefficient operations resulting in inflated costs. Since the financing is derived from a central source of funds, inefficient systems are not penalized and efficient systems receive no additional benefits.

Finally, the provision of provincial funds should be on an objective basis as possible. In a province as diverse as Alberta, flexibility is needed to meet situations that are unique to certain jurisdictions. Otherwise, some areas may be placed in a situation wherein a significant portion of their operating budget is devoted to pupil transportation to the

detriment of their educational programs.

Incorporating these principles in a provincial support formula that promotes efficiency of operation on the local level is a difficult task and accounts for the wide variation in approaches to financing pupil transportation. In Canada the most common approach to promoting local efficiency has been for the provinces to assume an increasing level of control over pupil conveyance.

Current Financing of Pupil Transportation

From 1964 through to 1970 provincial government support was based on the three-year moving average cost concept. Costs incurred and the number of pupils conveyed were calculated for each of the three immediately preceding years, a per pupil cost for each year was determined, then averaged. This amount formed the support base for the year and was multiplied by the number of eligible pupils being conveyed.

In 1971 another major change was made. Boards were offered a choice of three options for a single sum payment with a guarantee that they would receive an amount no less than that paid in 1970. They could select a payment based on one of the following formulae:

(a) the average of the approved cost of pupil conveyance for the three years 1968, 1969, and 1970.

(b) an amount equal to the Board's total approved costs for 1969.

(c) an amount equal to the Board's 1970 entitlement which would be based on the three-year moving average concept using the years 1967, 1968, and 1969.

Provision was made for an adjustment to the support level if a review of a board's pupil transportation operation by the Department of Education indicated that additional funds were warranted.

For 1972 the amount paid in 1971 was paid, although an increase of $150 per bus owned was added to the payment.

The three-year moving average plan paid approximately ninety percent of a jurisdiction's pupil transportation costs. It provided little incentive for a jurisdiction to operate economically and efficiently since only a very small portion of local funds was involved. This view was substantiated by the current review although its reliability is somewhat open to question inasmuch as inefficiency and uneconomical operation may be due to a lack of experience and information rather than to a lack of concern.

The current funding scheme holds support revenue to school boards at a fixed level unless additional services are required. It is argued that it has been a factor in stabilizing costs. Where enrolments have been static, or declining, the plan has functioned reasonably well and has certainly encouraged most boards to seek ways of eliminating unnecessary expenditures. A major disadvantage is that the plan, like the three-year average, does not accommodate to changing situations. It lacks flexibility except through the highly centralized process of a review of a board's entire pupil transportation operation by provincial authorities and certainly locks in inequitable situations present in the previous plan.

Contrary to current board opinion, however, the scheme has not placed an undue burden on local revenues. The following summary of financial support for the years 1969 - 1972 clearly indicates that provincial funding was more than ample.

DOES NOT INCLUDE PAYMENTS FOR:

*Depreciation Allowance
*Boarding Allowance
*In Lieu of Transportation

SUMMARY OF FINANCIAL SUPPORT

1969 - 1972

1. Total Conveyance Cost
2. Total Government Support
3. Percentage of Support
4. Unsupported Cost As A Mill Rate

	1969	1970	1971	1972
Pilot District #1	1. $338,293 3. 88.34	1. $371,397 3. 89.68	1. $402,114 3. 83.98	1. $426,282 3. 79.22
	2. $298,842 4. 2.65	2. $333,080 4. 2.54	2. $337,690 4. 4.12	2. $337,690 4. 5.57
Pilot District #2	1. $222,072 3. 92.03	1. $230,995 3. 89.71	1. $231,711 3. 96.27	1. $248,100 3. 89.91
	2. $204,365 4. .82	2. $207,237 4. 1.10	2. $223,078 4. .39	2. $223,078 4. 1.12
Pilot District #3	1. $206,587 3. 87.03	1. $208,841 3. 88.87	1. $202,378 3. 99.98	1. $217,997 3. 92.82
	2. $179,792 4. 1.72	2. $185,599 4. 1.58	2. $202,338 4. .00	2. $202,338 4. .96
Pilot District #4	1. $206,250 3. 83.70	1. $210,972 3. 87.58	1. $214,513 3. 96.84	1. $224,050 3. 92.72
	2. $172,634 4. 2.11	2. $184,770 4. 1.63	2. $207,736 4. .42	2. $207,736 4. .99
Pilot District #5	1. $260,575 3. 84.28	1. $263,860 3. 91.96	1. $273,143 3. 94.90	1. $268,389 3. 96.58
	2. $219,608 4. 2.63	2. $242,649 4. 1.39	2. $259,218 4. .85	2. $259,218 4. .55
Pilot District #6	1. $321,565 3. 101.16	1. $335,948 3. 94.32	1. $336,250 3. 94.22	1. $354,149 3. 89.46
	2. $325,287 4. .34	2. $316,863 4. 1.75	2. $316,824 4. 1.77	2. $316,824 4. 3.34
Pilot District #7	1. $217,733 3. 97.33	1. $237,838 3. 94.27	1. $232,958 3. 96.31	1. $234,509 3. 95.72
	2. $211,909 4. .37	2. $224,211 4. .75	2. $224,366 4. .47	2. $224,481 4. .53

	1969		1970		1971		1972	
Pilot District #8	1. $270,742	3. 87.56	1. $276,455	3. 84.06	1. $288,729	3. 86.34	1. $288,243	3. 86.48
	2. $237,073	4. 4.13	2. $232,395	4. 5.35	2. $249,278	4. 4.57	2. $249,270	4. 4.60
Pilot District #9	1. $315,574	3. 85.75	1. $322,635	3. 88.52	1. $316,296	3. 92.31	1. $306,749	3. 95.18
	3. $270,607	4. 2.22	2. $285,583	4. 1.81	2. $291,966	4. 1.17	2. $291,966	4. .70
Pilot District #10	1. $272,222	3. 90.64	1. $267,561	3. 97.46	1. $283,612	3. 97.19	1. $293,965	3. 93.77
	2. $246,731	4. 1.26	2. $260,765	4. .33	2. $275,646	4. .38	2. $275,646	4. .88
Pilot District #11	1. $451,056	3. 100.68	1. $511,426	3. 95.03	1. $550,432	3. 88.30	1. $577,017	3. 84.23
	2. $454,133	4. .10	2. $486,014	4. .78	2. $486,014	4. 1.84	2. $486,014	4. 2.43
Pilot District #12	1. $283,378	3. 94.55	1. $302,059	3. 89.76	1. $306,550	3. 91.37	1. $317,895	3. 88.11
	2. $267,920	4. 1.25	2. $271,119	4. 2.06	2. $280,094	4. 1.69	2. $280,094	4. 2.33
Pilot District #13	1. $202,830	3. 83.26	1. $207,360	3. 83.60	1. $216,763	3. 94.93	1. $228,665	3. 89.98
	2. $168,880	4. 1.72	2. $173,360	4. 1.77	2. $205,764	4. .55	2. $205,764	4. 1.14
Pilot District #14	1. $292,546	3. 94.91	1. $304,656	3. 94.41	1. $352,796	3. 82.58	1. $358,958	3. 81.16
	2. $277,648	4. .82	2. $287,621	4. .77	2. $291,334	4. 2.76	2. $291,334	4. 3.11
Pilot District #15	1. $324,102	3. 89.53	1. $346,004	3. 98.89	1. $385,138	3. 89.06	1. $372,683	3. 92.04
	2. $290,155	4. 2.22	2. $342,159	4. .25	2. $343,018	4. 2.70	2. $343,018	4. 1.82

	1969		1970		1971		1972	
Pilot District #16	1. $282,399	3. 84.36	1. $312,748	3. 83.03	1. $328,546	3. 89.07	1. $339,654	3. 86.10
	2. $238,219	4. 1.91	2. $259,681	4. 2.21	2. $292,633	4. 1.51	2. $292,430	4. 1.99
Pilot District #17	1. $104,448	3. 98.10	1. $110,754	3. 102.78	1. $117,342	3. 98.76	1. $121,008	3. 95.77
	2. $102,468	4. .02	2. $113,836	4. .20	2. $115,889	4. .01	2. $115,889	4. .34
Pilot District #18	1. $304,851	3. 85.57	1. $328,375	3. 89.16	1. $340,408	3. 91.63	1. $360,642	3. 86.49
	2. $260,855	4. 2.88	2. $292,794	4. 2.24	2. $311,924	4. 1.73	2. $311,924	4. 2.91
Pilot District #19	1. $231,216	3. 94.27	1. $266,049	3. 91.31	1. $265,648	3. 91.45	1. $255,545	3. 95.06
	2. $217,976	4. .51	2. $242,930	4. .90	2. $242,930	4. .88	2. $242,930	4. .49
Pilot District #20	1. $418,558	3. 87.03	1. $481,989	3. 86.98	1. $548,614	3. 82.36	1. $614,716	3. 80.01
	2. $364,268	4. 1.50	2. $419,212	4. 1.54	2. $451,863	4. 2.30	2. $491,862	4. 2.74
Pilot District #21	1. $284,396	3. 90.69	1. $309,508	3. 85.42	1. $334,457	3. 86.98	1. $352,620	3. 82.50
	2. $257,926	4. 2.14	2. $264,381	4. 4.41	2. $290,902	4. 4.25	2. $290,902	4. 4.30
Pilot District #22	1. $195,066	3. 89.01	1. $211,062	3. 89.61	1. $213,598	3. 93.86	1. $219,247	4. 91.44
	2. $173,623	4. .98	2. $189,126	4. .98	2. $200,483	4. .58	2. $200,483	4. .79
Pilot District #23	1. $ 32,492	3. 82.78	1. $ 34,205	3. 98.21	1. $ 34,667	3. 97.94	1. $ 39,175	3. 86.67
	2. $ 26,898	4. .80	2. $ 33,953	4. .00	2. $ 33,953	4. .10	2. $ 33,953	4. .80

It has been suggested that the current scheme could be retained if an escalation factor, based on an increase in commodity costs, were added. An increase of five or six percent would maintain the present cost stabilization while allowing boards a reasonable addition in revenue to accommodate cost increases. It would, however, still retain the weaknesses already outlined.

ALTERNATIVE METHODS FOR TRANSPORTATION FUNDING

Flat Grant Per Pupil

A flat grant per pupil, based on a calculated cost for transportation or on an averaging of costs throughout the province, is simple to apply and involves very little administration. It can be a fixed amount, regardless of where the pupil lives, or it can be dependent on pupil location by providing a higher payment for greater distances. Many variations are possible. Manitoba pays transportation costs up to $175 per pupil; Saskatchewan pays $57 per pupil plus $49.50 per route mile travelled.

In Alberta justifiable costs vary on a wide scale. Per mile costs varied from thirty-three cents to fifty cents. A flat grant per pupil discriminates against an area that has necessary high per pupil costs and gives a bonus to the area with a low per pupil cost. A jurisdiction with a concentrated pupil population can readily operate under this type of funding but a jurisdiction with sparse population, or a widely dispersed population, finds this type of funding to be very inequitable.

Regardless of its modifications, this type of provincial support may be in conflict with the concept of a foundation program goal of equalization of educational opportunity.

Bus Fee Plus Mileage

This support scheme involves the payment of a fixed amount per bus, based on its capacity, travelling a minimum mileage per day. Any mileage above this is paid on a per mile basis. Ontario utilizes this system of support. It provides a guaranteed level of support thus aiding financial planning for both boards and operators. It recognizes that there are fixed costs of operation regardless of the mileage a bus travels and also recognizes that every route mile does not cost the same amount.

The major disadvantages are the difficulty of preparing acceptable fee schedules for the many different classes of school buses in use throughout the province and in accurately measuring and recording daily route miles. To be effective it involves external monitoring, a substantial amount of administrative detail, or a level of local support that will force boards to be aware of any unnecessary expenditures.

Fixed Percentage Cost

Variations of this plan have been used in Alberta in previous years. From 1954 to 1957 provincial support was forty percent of the board's actual expenditure; from 1958 to 1959 it was fifty-five percent; and 1960 it was fifty-seven percent.

Many states use this type of funding but generally do not provide more than fifty percent of the costs of operation. The theory is that if each

district has to pay a substantial percentage of the costs of pupil transportation it has an incentive to operate efficiently and economically. With this type of funding, it is assumed that there is less need for rigorous monitoring of pupil transportation expenditures by the state or province.

Its greatest advantage is that it retains decision making at the local level. However, whatever the percentage of the costs a jurisdiction must bear itself is unequalized.

Payment of All Costs

This form of support, like provincial ownership, inevitably results in removing decisions from the local level to the provincial level. It also involves a substantial increase in provincial staff. Theoretically the local board is responsible for operating the system, but under this type of support they must secure provincial approval for all decisions involving money. Flexibility is lost and it is questionable if any real economies are actually brought about. A few boards in Alberta felt that one hundred percent funding was desirable. Most of boards were willing to accept a lower level of support in return for autonomy in operating the system in accordance with the wishes of their constituents.

Independent Appraisal

This type of funding requires an examination of each jurisdiction's pupil conveyance system. The basic theory is that each board or private contractor should receive the same rate of return on investment and effort after considering the circumstances that are beyond their control. In a province like Alberta the concept has merit since it recognizes that many variable factors such as geographical location, density of transported

population, type of operation and salaries influence the costs of transportation. In order to accommodate the increased costs associated with these features, and thus provide a better measure of transportation need, the Department of Education would retain the authority to approve the rate at which boards would be reimbursed for transportation costs. Under this system the Department would provide advisory assistance, set up standards and require that they be observed.

PROPOSALS FOR FUTURE FINANCIAL SUPPORT

Several methods for funding pupil transportation are suggested. It is recognized that the implementation of a new funding program will require a period of adjustment. Consequently, regardless of the plan finally selected, it should include a feature that would provide a jurisdiction with at least the same monetary entitlement in the year of implementation as it received in the immediately preceding year provided that any such entitlement did not exceed the board's current expenditure.

Proposal #1 Bus Fee Plus Mileage

The indepth review indicated an average per mile cost of operation of 41.7 cents per mile. However, the range was from 33 cents per mile for a completely board owned operation to 50 cents per mile for a completely contract operation.

These differences were expected since there is a wide variation in a number of cost factors. A school board owning a major portion of its bus fleet, or a fleet contractor, can purchase buses at large savings of $1,000 or more per unit compared to a small operator. Gasoline can be

purchased for as low as 34.8 cents per gallon compared to a high of 55 cents per gallon. This holds true for tires, batteries, oil, anti-freeze and spare parts. Board owned garages can provide a much lower cost service and the allowance for a contractor's return on his investment varies considerably throughout the province.

The problem of calculating the basic cost in the schedule is an extremely difficult one. Does one consider the prime cost for all factors thus bonusing a well managed system? Is a "middle of the road" approach more appropriate even though it bonuses board operations where there is no need for a profit factor? Is the solution to accept the view that the basic cost is that of a well managed public operation and that any additional operating costs, or costs for contracting out pupil transportation, are a board's own responsibility?

Consideration was given to paying on the basis of route miles. This type of funding generally involves monitoring in order to verify the amounts claimed. More important, is the fact that any figure chosen between the two extremes would, in essence, be unduly supporting or promoting the use of publicly owned buses.

A "bus fee plus mileage" system of funding incorporates the route mile concept with other factors that affect costs. It recognizes that there are fixed costs such as depreciation, insurance, license, financing, profit; that there are operating costs such as gasoline, oil, tires, maintenance; and there are drivers' salaries to be paid. Since the study indicated that the average route was approximately forty miles in length, the proposal provides for a basic yearly dollar amount for each size of bus and a

variable payment for the total yearly approved route miles in excess of forty miles per day for the number of days operated in a school year.

Bus Rated Capacity	Basic Yearly Support	Rate Per Miles For Mileage in Excess of 40 Miles Per Day
under 24	3,300	33.0¢
24	3,500	35.4¢
30	3,675	35.6¢
36	3,750	35.8¢
42	3,825	36.0¢
48	3,900	36.2¢
54	3,975	36.5¢
60	4,050	36.8¢
66	4,125	37.0¢
over 66	4,200	37.2¢

This formula is simple in application but involves gathering information on every bus route in the province. Wherever it is used, it involves monitoring by the senior government. It is acknowledged that in operational terms it appears to favor a board owned system. Further, it does not have the flexibility to cope with boards operating justifiably high cost systems or boards fortunate enough to have a low cost operation.

Some of the guidelines that have to be considered in making it operational include:

a) Depreciation for board owned buses would be included in the basic yearly support schedule.

b) Buses would be required to have an eighty-five percent load factor before being eligible for maximum support. If the load factor were seventy percent the support would be $(\frac{70}{85}$ X Basic Support).

c) Basic support would be for the number of days of operation in a normal school year. If buses operated for 175 days the support would be $(\frac{175}{200}$ X Basic Support).

d) Pupils ineligible for conveyance support would not be counted when considering the load factor of a bus.

e) Mileage necessarily travelled to provide service to non-eligible pupils would not be included in the calculation of daily or yearly route mileage.

f) Monitoring would be required in order to verify load factors and route mileage.

g) Extra-curricular mileage would not be included.

Proposal #2 Fixed Percentage of Costs

A percentage formula is simple to understand, is easily applied and has an automatic escalation feature. If, however, a reasonable percentage of support is to be forthcoming some problems arise. Should a board be permitted to operate all small buses when larger buses would be more economical? Should a board be permitted to operate its vehicles at capacities as low as fifty percent without penalty? To what extent is provincial monitoring of expenditures needed?

A percentage feature could be based on one of two propositions:

1. Percentage of the previous year's total cost.
2. Percentage of the current year's budgeted cost with a percentage held back and payable after a review

of the audited financial statement following the year end.

The latter method is more equitable if a percentage system is to be used. It has the flexibility to take into account any dramatic increase or decrease in the cost of providing conveyance service during the year.

Two proposals for a percentage funding formula are:

1. An amount equal to ninety percent of costs.
2. An amount equal to seventy-five percent of costs.

This type of open-ended support, with control completely vested with local school boards, was frequently suggested. While it is simple to apply, and retains decision-making on pupil transportation at the local level, a high level of support of ninety percent has the same deficiencies as the previous three-year averaging concept. There is little inducement for a board to be concerned with the cost of its operation. Payment of a low percentage, however, can have serious consequences for boards in high cost areas where the assessment is low since a disproportionate amount of support is required for the pupil transportation program.

Proposal #3 Current Funding With Appraisal

The study indicates that the 1971 proposals, wherein a board could select a method of funding pupil transportation from three options, could be retained. An escalation factor, based on the increase in commodity costs since 1971, would be added along with a provision that no board could receive more than its current costs. On the basis of the study, there is considerable evidence that this type of funding would accomodate a majority of the boards in terms of receiving adequate sums for financing

their pupil transportation operations. However, it would not remove the inequities that are evident in the current method of financing transportation.

The present Foundation Program Regulations also provide that the Minister of Education may, with cause, adjust the amount paid to any board. This adjustment to the support level is only made after a complete review of a board's pupil transportation operation by the Department of Education. Any board requesting a review is expected to provide records that would expedite the assessment of the pupil transportation system and its related cost. If, on the basis of this review, a jurisdiction can present evidence of a justifiable major change in its cost experience, it may obtain an adjustment in its allocation of provincial funds. Although the procedures are prescribed there is still a large element of subjective judgment involved and a considerable degree of provincial control with respect to financing.

It does, however, have the flexibility that a completely objective formula does not have and while some advocates of local autonomy might object to the Department of Education retaining this authority, the current evolution of the concept in other provinces makes it unlikely that the authority would be abused.

Proposal #4 Percentage of Costs and Equalized Assessment or Appraisal

The fourth proposal is a variation of the percentage concept. It provides that a board be responsible for the first ten percent of its busing expenditure, plus the next fifteen percent up to an amount equal to two mills on its current equalized assessment. Thus the support would be seventy-five percent of costs plus the difference between fifteen percent

of cost and an amount equal to two mills on a jurisdiction's assessment, if any.

The preamble to this section recognized that the introduction of a new funding program would require a period of adjustment. If a board does not favor this type of funding for the year of implementation it is suggested that it be granted the option of delaying acceptance for a maximum period of two years. During this period it would receive at least the same monetary entitlement as it received in the year immediately preceding the introduction of the new plan, provided that any such entitlement did not exceed the board's expenditures.

It is also anticipated that some boards will not favor either of these proposals. In such cases, it is suggested that they have the option of requesting a complete review of their pupil transportation operation by the Department of Education. In April, 1971, the Department of Education established guidelines for such a review and these were mailed to all school boards. Any board requesting a review was expected to provide records that would expedite the assessment of their pupil transportation system and its related costs.

The percentage of costs and equalized assessment concept can be made operational on the basis of the previous year's cost or the current year's expenditure. If implemented, the latter is favored. At the beginning of the year, after a board has submitted its budget, it would be entitled to a portion of its anticipated conveyance support based upon the budgeted expenditure with the balance being receivable after the department receives the audited financial statement for that year.

Example A

In Pilot District #1 the 1972 busing costs were $426,282 and Foundation Program Support was $337,690 or 79.2% of costs. Two mills were valued at $31,812.

10% of costs = $42,628 15% of costs = $63,942 75% of costs = $319,711

Difference between 15% of costs and 2 mills = $63,942 - $31,812 = $32,130

Foundation Program Support = $319,711 + $32,130 = **$351,841 or 82.5%** of costs.

If the option of taking its current entitlement were exercised instead of the new plan, it would receive $337,690 or 79.2% of costs.

Example B

In Pilot District #2 the 1972 busing costs were $248,100 and Foundation Program Support was $223,078 or 89.9% of costs. Two mills were valued at $43,657.

10% of costs = $24,810 15% of costs = $37,215 75% of costs = $188,075

Difference between 15% of costs and 2 mills $37,215 - $43,657 = $0.
(cannot be negative)

Foundation Program Support = $188,075 + $0 or 75% of costs.

If the option of taking its current entitlement were exercised instead of the new plan, it would receive $223,078 or 89.9% of costs.

This proposal requires the local jurisdictions to carry a reasonable part of the costs of transportation as an incentive for more efficient operation. It is also assumed under this model that the Department of Education will not have to supervise rigorously or approve all expenditures for pupil transportation. The provision limiting responsibility for costs after the first ten percent to the next fifteen percent or two mills on the current assessment protects a jurisdiction in a low equalized assessment area that has high conveyance costs.

This type of funding would provide a maximum amount of autonomy to a board and require the least monitoring by the government. It can apply to both rural and urban systems.

Guidelines for the operation of the support formula could include the following:

a) Depreciation for board owned buses would be provided for separately.

b) The cost to convey ineligible pupils would be excluded from the total cost of pupil transportation. The secretary's declaration would serve here as it does on the pupil count for other Foundation Program grants.

c) The busing cost for extra-curricular activities and educational trips would be included in the total conveyance cost calculation. Ceilings on expenditures for this aspect of service would replace the need for monitoring.

d) Administrative costs are already included in the regular Foundation Program grants. Therefore they should either be excluded or a ceiling placed on their inclusion.

e) Buses would have to have an eighty-five per-cent load factor to be eligible for maximum support. A suitable period of adjustment of at least two years from the date of implementation of the plan should be allowed before this type of clause is introduced.

f) Records kept by the board on all phases of the pupil transportation system would have to be sufficiently broad and deep to permit meaningful analysis and comparison.

61. It is recommended that the Department of Education accept Proposal #4 as the basis for a new support formula for financing pupil transportation.

EVALUATING PUPIL TRANSPORTATION

The weaknesses in basing a proposal for provincial support on costs that are not monitored by the senior government is that the costs may be due to inefficient operations and are therefore unnecessarily inflated. Viewed on a provincial basis these costs will range from the very efficient to the very inefficient but, on the average, they will furnish an index of

moderate efficiency. In the study the cost reductions possible in some jurisdictions ranged as high as twenty percent.

Herein lies the dilemma. How can the senior government provide for the consideration of cost factors beyond the control of local jurisdictions and keep unnecessary costs at a minimum while retaining, at the local level, ready flexibility to make adjustments in the pupil transportation program.

One of the basic requirements in the area of pupil transportation is a set of operating cost guidelines to ensure that there is a fair allocation of the funds available. These guidelines would give both the Department of Education and the individual school boards a degree of control over the costs of pupil transportation which is not available at the present time.

A second requirement is the evaluation of pupil transportation systems throughout the province on a rotating basis in which all phases of the pupil transportation service are the subject of a thorough review. Its purpose would be to give the board and the Department of Education an appraisal of the service offered and the costs involved. The focus of the appraisal would be aimed at improvement rather than a justification of current practices and thus would be more concerned with what is right than with who is right.

These evaluations should be a joint effort of the Department of Education and local officials. This kind of cooperative effort would combine the advice of personnel who have a wide acquaintance with pupil

transportation policies, practices, and developments throughout the province and elsewhere with that of the local officials who are familiar with local conditions and who see the necessity for various policies. This approach should ensure that the appraisal is sufficiently broad and deep to support meaningful analysis and comparison.

62. It is recommended that the Department of Education produce cost guidelines for pupil transportation and that information be collected from school boards on a continuing basis for updating the guidelines.

63. It is recommended that the Department of Education assume the responsibility for initiating an evaluation of pupil transportation systems throughout the province, on a rotating basis, at least once every four years.

OTHER FINANCE FACTORS

Financing School Bus Purchases

The study revealed that a few boards still assist school bus owners in the financing of school bus purchases by providing loans or co-signing promissory notes. These loans can accumulate to a sizeable amount as evidenced by the fact that one board had loans of $78,786 in 1971, $113,637 in 1972, and $73,605 in 1973 for a total sum of $226,028 in the three year period. It was particularly disturbing to note that the loans are offered at the rate of interest charged by the bank to the board

without any administrative charges. Permission for these loans is provided by Section 71 (3).

> (3) Nothing in this section prevents an employer
>
> (a) with the prior approval of a board, from entering into a contract with the board or with a person contracting with the board
>
> (i) for services to be performed by the employee,
> (ii) for the sale in the ordinary course of business of the employee of goods and merchandise, or
> (iii) for the rental of accommodation, or
>
> (b) with the prior approval of the Minister, from entering into a contract with a board for the purchase of property.

It is questionable whether the practice of financing the purchasing of school buses was intended in Section 71 (3) (b).

64. It is recommended that the practice of school boards assisting in the financing of school buses for private owners be discontinued.

65. It is recommended that the Department of Education discontinue the approval of any board requests for authorization to borrow monies to be used to assist private owners in school bus purchases.

Sale of Buses and Routes

A major focus of this report has been the need for school boards to have closer control over the entire pupil transportation operation. The principle that the ownership of a school bus or the fact that an owner has provided service on a particular route for a number of years does not give

the owner a route franchise has to be clearly established in some jurisdictions. As rural areas experience a shift or decline in population, it becomes vitally important, in terms of the efficiency and economics of pupil transportation operations, for the board to have the management authority to make changes that are in the best interests of the pupils and public they serve. Contract operators are, in some instances, challenging the right of boards to make these decisions.

If a board has either permitted or condoned the sale of a bus by one operator to another without clarifying the fact that such a sale is for the bus only, and that its purchase does not necessarily mean employment with the board, it has compromised its authority to effectively manage the transportation system.

66. It is recommended that boards offer to purchase privately owned buses at a fair market value, after independent appraisal, when any such contract is terminated.

67. It is recommended that boards not accept or approve any arrangements made by a contractor for the transfer of a contract for transportation services on any particular route served by that contractor until the previous contract has been terminated.

Educational Trips

For years teachers have indicated the positive effects of field trips in providing practical, concrete experiences for pupils. Properly planned, they produce effective learning and insight and, over the years, they have become an integral part of the curriculum for both rural and urban pupils.

Boards were unanimous in expressing the view that curricular changes mandated by the Department of Education, were forcing boards to make more and more extensive use of school buses for purposes of instruction. This is compatible with trends observed in other provinces and states, although one questions the extremes that some educators seriously advocate in this field. If the financing of pupil transportation for educational trips was incorporated into the foundation program, curricular changes could be reviewed for funding at the time they are proposed.

It is often difficult to obtain the greatest educational advantage for both urban and rural pupils if opportunities are not made available to broaden the environment. Educational trips provide means of enriching the educational resources available. They are particularly desirable in remote areas where pupils have limited contacts with the world beyond their community. To deny provincial funding for field trips, particularly in terms of modern day curriculum demands, is questionable and tends to assure that the poorest and remotest districts, where such usage should first be provided, will be the last and least likely to afford them. A control feature can be retained by placing a ceiling on these expenditures. It should, however, be flexible enough to accomodate those areas where the need, as well as the costs involved, are the greatest.

68. It is recommended that provincial financial support for educational trips be provided for both urban and rural pupils.

69. It is recommended that provincial financial support for educational trips be incorporated into the Foundation Program Regulations as a part of regular transportation costs.

Contracts

A number of boards did not have written contracts for non-board owned buses. Others had brief contracts that did not clearly specify the rights and responsibilities of each party. This can lead to problems for both parties:

1. Under what circumstances can a contract be terminated?
2. What are the terms of payment in the event that school is cancelled for one or more days?
3. Does the board have the option of altering routes as conditions change?
4. Does the board have the right to inspect contract buses for safety and cleanliness?
5. Does the board have any rights with regard to driver qualifications?
6. Does the board have the right to specify the size of bus and, as conditions change, does the contract provide for changes in payment?

These, and many other problems of a similar nature, make it necessary for boards to have well written contracts that retain control of the operation with the board.

70. It is recommended that the Department of Education, in consultation with the Alberta School Trustees' Association, prepare standard forms of contracts for use with bus owners and drivers, with suitable

optional clauses to accommodate varying conditions.

71. It is recommended that the Department of Education require written agreements for any private contractors or drivers employed by boards.

Monitoring Practices

In other areas of this report evidence has been presented indicating that there is a need for boards to give more attention to making comprehensive checks of bus mileage reports and for boards to retain control over routing. Monitoring has been viewed as distasteful, whether practiced by senior or local government. Nonetheless, cost control is essential; particularly as pupil transportation is a service that will take a growing percentage of educational funds.

72. It is recommended that all boards set up sound procedures and checks for obtaining accurate information on bus route mileages.

Public Versus Private Ownership

There have been many studies made of the problem of public owned versus private contracted buses. As indicated in the preliminary report, the trend in both the United States and Canada is towards public ownership. In Alberta approximately one-half of the buses are publicly owned. This is in sharp contrast to the United States where the figure is about seventy percent and the other western provinces where most of the buses are publicly owned.

Almost all of the investigations of the past forty years have concluded that public ownership is preferable, advantages of board control

are related to lower costs, better control, greater flexibility, safer transportation, better drivers, improved maintenance, and more adequate service. In recent studies of this question, the range of savings quoted as being possible through public ownership ranges as high as fifty percent while the most frequent figure is ten to twenty percent. The consistency with which the studies revealed major differences in costs justifies the view that boards should consider the relative merits of a public versus contrast operation for their particular area. This is of particular importance if buses are to be used for more than home to school and return transportation.

It is acknowledged that local conditions play an important role in determining what is the most economical and most feasible system. The trend towards public ownership has accelerated in the past ten years but it must be emphasized that it does not automatically reduce costs or eliminate the problems. The evidence seems to indicate that under sound management, maximum economy and better service can be obtained through public ownership. However, ownership is only one of a complex set of factors involved in providing a sound pupil transportation service.

This was aptly illustrated in the indepth study of several of the pilot jurisdictions. A comparison of similar costs in six areas revealed the following per mile costs:

Jurisdiction	Type of Ownership	Costs Per Mile
Pilot System A	All Contract	$.50
Pilot System B	All Contract	.50
Pilot System C	All Contract	.36
Pilot System D	Part Public	.33
	Part Contract	.38
Pilot System E	All Public	.48
Pilot System F	All Public	.37

While a general statement cannot be made with regard to which is the more desirable, the study indicated that there was considerable merit in every board retaining some publicly owned buses to provide greater flexibility for the system. They would also provide cost guidelines for individual boards to consider which type of ownership is most advantageous.

Depreciation

Although it is not uncommon for school buses to be used for ten to twelve years of service, the practice in Alberta has been to retain buses for an average of eight years and replace them. Nearly ninety percent of the buses in the survey were less then eight years old and the older buses were, in most cases, retained as spare vehicles. The Foundation Program Regulations provide for board owned buses to be depreciated over an eight year period. After that period, a board may purchase a new vehicle and the cost of depreciation, on a set scale, will be paid by the province.

The cost of a bus includes two major components, the chassis and the body. In general, each of these components represents about fifty percent of the total cost. When a vehicle is replaced the bus bodies for the most part are still serviceable; yet in practice they are seldom taken off the old chassis and placed on a new one. Thus one of the major items of bus cost is discarded, even though it is still serviceable.

Coupled with the cost of depreciation is the cost of maintenance. In view of the evidence that suggests that the average amount spent on maintenance is about one-half the costs of depreciation, it would appear that it would be cheaper to keep vehicles in operation longer than eight years unless maintenance costs rise sharply. The cost of maintenance

is, however, a very significant factor in determining how long a bus should be kept in service. It is possible that the maintenance costs might reach a point of diminishing return--a point at which the expenditures do not give the board real value for the money expended.

The difficulty with extending the life of buses beyond the present eight-year period, or reducing it to a six-year period as a few boards suggested, is that some measure of serviceability would have to be introduced to determine whether or not the life of the bus had reached a limit. The measure would have to consider maintenance costs in terms of safe and efficient operating conditions. This type of measure would ensure that remote rural areas which do not have all-weather roads would not be discriminated against and, at the same time, that those in favorable areas would not automatically replace buses at the end of eight years even through the vehicles are still capable of offering adequate and safe service.

Most of the boards interviewed were of the view that the present depreciation schedule of eight years was satisfactory. There is insufficient evidence to warrant a change at this time although further consideration should be given to providing relief in those unique situations where road and weather conditions may warrant the application of the measure of serviceability concept.

73. It is recommended that the depreciation period for school buses in the Foundation Program Regulations be retained at eight years.

Extra-Curricular Activities

Costs for extra-curricular activities vary widely throughout the province from small amounts up to $30,000. The actual costs are difficult to determine because the majority of boards have not maintained a separate account of revenue and expenditures for this item.

A majority of boards were willing to accept local responsibility for the costs involved in extra-curricular activities provided that the level of support for regular conveyance costs was at a reasonably high level.

It is recognized that the terms of reference of the study provided for extra-curricular activities to remain a local responsibility. However, unless strict monitoring procedures are implemented by the government it would be difficult, if not impossible, to control the inclusion of these costs in the regular transportation budget.

As centralization of high school facilities has occurred it has become imperative for boards to become more involved in conveyance for extra-curricular activities. To deny funds for this aspect of public education is to deny students opportunities for involvement in a major part of their experiences at school.

In view of the range in expenditures for extra-curricular activities, a control feature has to be retained by placing a ceiling on these expenditures. Flexibility should be built into this control feature to accomodate those areas where the need, as well as the costs, are the greatest.

74. It is recommended that the Foundation Program Regulations be amended to include the costs of extra-curricular activities as a part of pupil transportation costs.

CONCLUSION

Education has been recognized as an ever changing process for society's interaction of yesterday's achievements, today's needs and tomorrow's hopes. Pupil transportation, as an integral part of education, likewise reacts to immediate concerns and pressures that emerge from the society it serves.

One does not have to be an economist to recognize the spirit of austerity being felt by education everywhere and more specifically of concern here, by pupil transportation. Based on current trends, the growth of pupil transportation will surpass the growth in enrolment as urban areas become more involved. It has become one of the major services of the public school.

Inasmuch as pupil transportation is a joint responsbility of the provincial government and local boards it is imperative that both bodies continually review their past performance, no matter how good, and continue their efforts to provide a safe operation offering good service in terms of efficiency and economy.

SUMMARY OF RECOMMENDATIONS

ADMINISTRATION

1. It is recommended that the primary responsibility for the provision of pupil transportation continue to be vested with school boards.

2. It is recommended that the province establish and enforce only such laws, rules, and regulations as are necessary to facilitate the work of the school boards and to ensure the provision of minimum essentials.

3. It is recommended that the Department of Education, in consultation with the Department of Highways, undertake to prepare and publish a Handbook on Pupil Transportation.

4. It is recommended that the Handbook be distributed to all school boards and school bus contractors in the province.

5. It is recommended that the Department of Education embark on a program designed to inform the general public of pupil population trends, the need for busing in the urban and suburban areas, and the costs that are involved.

6. It is recommended that the Field Services Branch of the Department of Education engage personnel with experience in school bus fleet operations to work with the Field Administrative Officer assigned to pupil transportation.

7. It is recommended that such personnel be located in Edmonton to provide assistance to the northern part of the province and in Calgary to provide assistance to the southern part of the province.

8. It is recommended that school boards, the Alberta School Trustees' Association and the Department of Education give further study to the feasibility of organizing regional school transportation systems, wherein the planning of pupil transportation could be carried out without regard to school district boundaries.

9. It is recommended that the government legislation be amended to provide that school boards may enter into an agreement with a recreation commission, or any other similar body, to permit the use by such commission or other body of buses owned by the Board for the purposes of a recreation program.

10. It is recommended that school boards, the Alberta School Trustees' Association and the Department of Education consider guidelines for the operation and financing of the community use of school buses.

11. It is recommended that where legal or insurance restrictions prevent the widest possible use of school buses that a concerted effort be made to change such regulations.

12. It is recommended that school boards give serious consideration to making agreements with neighbouring jurisdictions to fully utilize maintenance facilities already in existence and that consideration be given to the joint construction and operation of such facilities where none presently exist.

13. It is recommended that the authority for the purchases of school buses continue to be vested with school boards.

14. It is recommended that the Alberta School Trustees' Association and the Government of Alberta make representations to have the federal sales tax removed from the purchase of school buses.

15. It is recommended that the responsibility for the purchase of school bus supplies continue to be vested with school boards.

16. It is recommended that the Department of Education and the Alberta School Trustees' Association jointly explore the area of school bus insurance.

PLANNING AND OPERATIONS

BUS SAFETY AND OPERATIONS

17. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act be reviewed to ensure that all vans and buses of less than 24 passenger capacity rating used for pupil conveyance conform to high standards of construction, design, quality of materials and equipment to reduce safety hazards to a minimum.

18. It is recommended that the Highway Traffic Board Regulations of the Public Services Vehicles Act be reviewed to provide a uniform standard for the external appearance of all vehicles of less than 24 passenger capacity rating used for pupil transportation with regard to signs, lettering and warning lights to ensure the instant recognition of the vehicle by all motorists.

19. It is recommended that the present Highway Traffic Board Regulations of the Public Service Vehicles Act be amended to guarantee that all vans and buses used for pupil conveyance on highways be yellow in color and that lettering and warning lights conform to high standards to ensure instant recognition of the vehicle by all motorists.

20. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act be amended to provide that where a school bus, whether new or used, is to be used for personal purposes that it

be the responsibility of the purchaser to remove the identification lettering and change the color of the vehicle to other than yellow.

21. It is recommended that Boards be encouraged to use the 3-2 buses when considering replacements to their bus fleets.

22. It is recommended that the Department of Education, the Department of Highways and the Alberta School Trustees' Association press for changes in the D-250 Regulations to provide for more ample seating arrangements.

23. It is recommended that the Department of Education express its concern relative to pupil seating ratings to other provincial departments of education with a view to obtaining support for the changes in the D-250 Regulations and, more important, changes by school bus manufacturers in the construction of the seats on bus units.

24. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act continue to require no less than two formal inspections of school buses each year by a qualified mechanic and that these inspections be required in the interval between the end of the school year and the beginning of the next school year and at a subsequent period not exceeding six months.

25. It is recommended that the Highway Traffic Board Regulations of the Public Service Vehicles Act require a statutory declaration by the

mechanic on the inspection certificate in place of the present procedure of only requiring his signature and certificate number.

26. It is recommended that provincial guidelines be established for the inspection of school buses by drivers, supervisors, and/or contractors.

27. It is recommended that the guidelines regarding the inspections and maintenance to be carried out on a daily, weekly, or other period deemed suitable, be published in a manual format and be distributed to all jurisdictions in the province concerned with pupil transportation.

28. It is recommended that where school boards engage contract buses that the contract clarify the right of the school board to require inspections, when in their opinion, they are deemed necessary.

29. It is recommended that the minimum age of school bus drivers remain at 18 years.

30. It is recommended that the maximum age of school bus drivers not be established by provincial legislation but be controlled by local school authorities in terms of the ability of the driver to drive the school bus and by his medical condition as established by medical reports.

31. It is recommended that a special license for school bus drivers be established requiring a written qualification examination designed to test the special knowledge required to operate a school bus in addition to any written examination given to ordinary drivers; that each school bus driver qualify in a road test in a school bus and that where the road test is taken in a bus of less than 24 passengers the license restrict the driver to a vehicle of the size or smaller than the bus in which the road test was taken.

32. It is recommended that all employees of the Department of Highways conducting road examinations for school bus drivers be required to be in possession of the required license themselves and that the Department of Highways be responsible for any expense involved in obtaining said license.

33. It is recommended that provincial guidelines for a bus drivers' manual be developed and that school boards be encouraged to adapt it to include their own policies and regulations.

34. It is recommended that the government consider the reactivation of the Safety Division in the Department of Highways, or adding staff to the Enforcement Division of the Department of Highways, with a view to promoting safety programs in the schools and being responsible for pre-service and in-service training programs for school bus drivers.

35. It is recommended that school boards operating publicly owned and/or contracted transportation systems require that all accidents, regardless of degree, be reported to the school board.

36. It is recommended that the present Highway Traffic Board Regulations of the Public Service Vehicles Act be amended to require that all school bus accidents, regardless of degree, be reported to the Enforcement Division of the Department of Highways, and that a consolidated cumulative report of these accidents be provided to the Department of Education at least twice a year.

37. It is recommended that further study be given to the question of making seat belts on school buses mandatory.

38. It is recommended that an interdepartmental committee composed of members from the Department of Highways and the Department of Education be established.

39. It is recommended that the interdepartmental committee meet, at least once annually, with members from other referent groups such as the Alberta School Trustees' Association, Alberta Safety Council, the Alberta Federation of Home and School Associations and the Alberta School Bus Operators' Association.

40. It is recommended that the Alberta School Trustees' Association and the Department of Education give further study to the question of increased speed limits for school buses.

41. It is recommended that school boards have written policies governing the maximum speed vehicles used for pupil conveyance may travel considering road conditions and traffic volume within the boundaries of their jurisdiction.

PLANNING AND OPERATIONS

PLANNING BUS ROUTES

42. It is recommended that the superintendent of schools assume an executive role in appraising the effectiveness and costs involved in transportation.

43. It is recommended that school systems, whether publicly owned or contracted, employ a bus supervisor.

44. It is recommended that where it is not feasible to employ a bus supervisor in a full-time, part-time, or dual position capacity, that school systems cooperate to employ a bus supervisor jointly to serve two or more systems.

45. It is recommended that the supervisor's duties be specified in writing to clearly establish his responsibilities and authority.

46. It is recommended that the Department of Education provide each school board with a manual of guidelines illustrating the procedures involved in planning efficient bus routes.

47. It is recommended that the Department of Education assume the responsibility for organizing training and information seminars on school bus route planning.

48. It is recommended that all school boards operating pupil conveyance systems develop and adopt clear operating policies and guidelines regarding the routing and scheduling of school buses.

49. It is recommended that school boards assign the responsibility for school bus routing and scheduling to the school bus supervisor.

50. It is recommended that the Department of Education require all school boards involved in pupil conveyance to keep on file a master map of all routes currently in operation and a set of maps showing the individual routes currently in operation.

51. It is recommended that the Department of Education require all school boards involved in pupil conveyance to keep on file, in a suitable format, information showing the bus route number, the location of the pupils, the number of pupils conveyed on the bus and bus time schedules.

52. It is recommended that the additional costs of pupil conveyance involved in permitting pupils to have a choice of schools in a jurisdiction be a local responsibility.

53. It is recommended that the Section 156 of the School Act remain unchanged.

54. It is recommended that Section 5 (1) (a), Part B of the School Foundation Program Regulations, outlining conditions for eligibility for transportation support for rural areas remain unchanged.

55. It is recommended that the Department give further study to the costs involved in reducing the distances required for pupil eligibility for transportation for all pupils.

56. It is recommended that Section 7 (2) (a), Part B of the School Foundation Program Regulations, providing for three-quarters of a mile distance eligibility for transportation support for urban pupils be rescinded.

57. It is recommended that boards avoid door pick-ups whenever practicable and that they examine the possibilities of minimizing the number of stops along scheduled routes by exploring the possibilities of employing collecting points to greater advantage.

58. It is recommended that the decisions regarding school bus access continue to be vested with local school boards.

59. It is recommended that the School Foundation Program Regulations be amended to ensure that no school authority shall claim for transportation any pupils legally under the jurisdiction of another authority and that no transportation costs for any such pupils shall enter into the calculations of total transportation costs; provided, however, that by formal agreement, one authority may transfer all or part of its transportation responsibilities to another.

60. It is recommended that such transportation agreements be filed with the Department of Education.

FINANCE

61. It is recommended that the Department of Education accept Proposal #4 as the basis for a new support formula for financing pupil transportation.

62. It is recommended that the Department of Education produce cost guidelines for pupil transportation and that information be collected from school boards on a continuing basis for updating the guidelines.

63. It is recommended that the Department of Education assume the responsibility for initiating an evaluation of pupil transportation systems throughout the province, on a rotating basis, at least once every four years.

64. It is recommended that the practice of school boards assisting in the financing of school buses for private owners be discontinued.

65. It is recommended that the Department of Education discontinue the approval of any board requests for authorization to borrow monies to be used to assist private owners in school bus purchases.

66. It is recommended that boards offer to purchase privately owned buses at a fair market value, after independent appraisal, when any such contract is terminated.

67. It is recommended that boards not accept or approve any arrangements made by a contractor for the transfer of a contract for transportation services on any particular route served by that contractor until the previous contract has been terminated.

68. It is recommended that provincial financial support for educational trips be provided for both urban and rural pupils.

69. It is recommended that provincial financial support for educational trips be incorporated into the Foundation Program Regulations as a part of regular transportation costs.

70. It is recommended that the Department of Education, in consultation with the Alberta School Trustees' Association, prepare standard forms of contracts for use with bus owners and drivers, with suitable optional clauses to accommodate varying conditions.

71. It is recommended that the Department of Education require written agreements for any private contractors or drivers employed by boards.

72. It is recommended that all boards set up sound procedures and checks for obtaining accurate information on bus route mileages.

73. It is recommended that the depreciation period for school buses in the Foundation Program Regulations be retained at eight years.

74. It is recommended that the Foundation Program Regulations be amended to include the costs of extra-curricular activities as a part of pupil transportation costs.

ANALYSIS OF TRANSPORTATION COSTS, PRESENT PROVINCIAL SUPPORT

AND PROPOSED PROVINCIAL SUPPORT USING 1972 COSTS

		Divisions	Counties	Districts	Separates	Others	Total
1.	1972 Costs						
	1972 Cost	8,022,203	9,800,890	1,466,913	1,122,344	98,989	20,491,339
	1972 Support	6,930,627	8,779,088	1,323,412	768,062	83,368	17,884,557
A.	Unsupported Costs	1,091,576	1,021,802	123,501	354,282	15,621	2,606,782
2.	10% + 15% Proposal						
	1972 Cost	8,022,203	9,800,890	1,446,913	1,122,344	98,989	20,491,339
	Support	6,413,605	7,658,844	1,100,647	847,875	75,925	16,096,896
B.	Unsupported Costs	1,608,598	2,142,046	346,266	274,469	23,064	4,394,443
3.	10% + 15% Proposal or 1972 Entitlement						
	1972 Cost	8,022,203	9,800,890	1,446,913	1,122,344	98,989	20,491,339
	Support	7,070,093	8,781,071	1,340,315	888,997	90,020	18,170,496
C.	Unsupported Costs	952,110	1,019,819	106,598	233,347	8,969	2,320,843
D.	Difference In Support Levels Between A and B	(517,022)	(1,120,244)	(222,765)	79,813	(7,443)	(1,787,661)
E.	Difference in Support Levels Between A and C	139,466	1,984	16,903	120,935	6,652	285,940

"D" Indicates that if the 10 + 15% up to 2 mills had applied in 1972 the S.F.P.F. support would have been $1,787,661 less than actually paid out.

"E" Indicates that if, in 1972, the option had been either the 1972 entitlement or the 10 = 15% up to 2 mill feature, than the support for that year would have been $285,940 more than actually paid out.

GENERAL OPERATING INFORMATION

BOARD OWNED BUSES:

I.

Age (Model Year)	RATED PUPIL CAPACITY OF SCHOOL BUS										Total
	1-11	12-23	24	30	36	42	48	54	60	66	72	
1950-59												
1960								2				2
1961					1	1		1				3
1962			1		2	1	2					6
1963					7	3	3	5				18
1964					3	6	11	12		2		34
1965			3	1	9	13	13	15		1		55
1966			1	1	13	8	35	12		2		72
1967			1	10	44	14	29	17		2	1	108
1968				6	18	2	26	24		3		79
1969	1	2		2	27	5	26	14	1	1		79
1970		1		1	25	7	16	25	2	4	1	82
1971		1		2	34	10	24	18	2	1		92
1972		7			19	6	23	14		2		66
Total	1	11	6	23	202	76	208	159	5	18	2	711

CONTRACT BUSES

II.

Age (Model Year)	RATED PUPIL CAPACITY OF SCHOOL BUS										Total
	1-11	12-23	24	30	36	42	48	54	60	66	72	
1950-59					2			1				3
1960			1		2	2	2	1				8
1961				3	3	1	1	1				9
1962	1		1	1	6	1	4	2				16
1963			1	2	3	3	4	6			1	20
1964	1		2	3	2	9	10	6				33
1965	3		7	7	8	7	18	7				57
1966	5		2	2	11	10	13	11	2	1		57
1967	2	2		5	10	2	26	12	6	1		66
1968	1	4	1	4	24	5	12	11	6			68
1969	2	5		2	15	3	19	20	4	2		72
1970	5	5		2	15	1	16	9		3		56
1971	6	6		1	9		14	15	4	5		60
1972	9	4			9	4	13	15	14	4		72
Total	35	26	15	32	119	48	152	117	36	16	1	597

TOTAL
BOARD OWNED AND CONTRACT BUSES

III.

Age (Model Year)	RATED PUPIL CAPACITY OF SCHOOL BUS											Total
	1-11	12-23	24	30	36	42	48	54	60	66	72	
1950-59					2			1				3
1960			1		2	2	2	3				10
1961				3	4	2	1	2				12
1962	1		2	1	8	2	6	2				22
1963			1	2	10	6	7	11			1	38
1964	1		2	3	5	15	21	18		2		67
1965	3		10	8	17	20	31	22		1		112
1966	5		3	3	24	18	48	23	2	3		129
1967	2	2	1	15	54	16	55	29	6	3	1	184
1968	1	4	1	10	42	7	38	35	6	3		147
1969	3	7		4	42	8	45	34	5	3		151
1970	5	6		3	40	8	32	34	2	7	1	138
1971	6	7		3	43	10	38	33	6	6		152
1972	9	11			28	10	36	29	14	6		143
Total	36	37	21	55	321	124	360	276	41	34	3	1308

IV.

	BOARD OWNED	CONTRACT	TOTAL
Total Daily Route Mileage	51,879	46,568	98,465
Paved	11,794	7,298	19,092
Gravel	30,444	27,665	58,109
Other	2,963	131	3,094
Total Daily Loaded Route Miles	32,720	21,315	54,035
Total Daily Empty Route Miles	15,644	7,823	23,467

Date Due

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